May26'48

UNIVERSITY OF MINNESOTA RECEIVED MAY 26 1948 LIBRARIES

Virginia MEDICAL MONTHLY

OFFICIAL PUBLICATION OF THE MEDICAL SOCIETY OF VIRGINIA

CONTENTS

Guest Editorial. J. S. Jones ---------- 203

A New and Simple Procedure for Developing Esophageal Voice in the Laryngectomized Patient. E. Trible Gatewood, M.D., Richmond, Virginia ---------- 206

Traumatic Loose Bodies from the Patella. George A. Duncan, Lt. Col., M.C., Norfolk, Virginia ---------- 210

Diverticula of the Jejunum—With Report of Two Cases.—Carrington Williams, M.D., F.A.C.S., and John B. Walker, M.D., Richmond, Virginia ---------- 212

Rocky Mountain Spotted Fever. T. Stanley Meade, M.D., Richmond, Virginia ---------- 216

Acute Osteomyelitis of the Superior Maxilla in Infants. Francis H. McGovern, M.D., and Samuel Newman, M.D., Danville, Virginia ---------- 219

The Clinical Significance of Hemangiomata of the Leg. B. W. Haynes, Jr., M.D., Richmond, Virginia ---------- 221

A Study to Determine the Antibacterial Efficiency of Combined Tyrothricin and Sulfadiazine. Richard Kelso, M.D., and Basil Thompson, M.D., Arlington, Virginia -- 224

The Forum ---------- 226

Continued on page 4.

Refresher Course
University of Virginia
(See Page 229)

May 1946

XUM

YOUR HELP
1/2 Doz. 1 cc. Size No. 182
PARKE-DAVIS
THEELIN
IN OIL
EACH 1 CC. CONTAINS:
1 mg.
10,000 INTER. UNITS
A solution of the crystalline estrogenic substance, Theelin, in peanut oil.
PARKE, DAVIS & CO.
PARKE, DAVIS & COMPANY
DETROIT 32 • MICHIGAN

Virginia Medical Monthly

Vol. 73, No. 5.
WHOLE No. 1127.

RICHMOND, VA., MAY, 1946

$2.00 A YEAR
25 CENTS A COPY

Guest Editorial

What the Farmer Expects from Medicine

THE 57 million people who live on farms and in small towns have been conservative and slow about raising their voices in regard to their health needs. They have long been confident that the rural way of life is the healthiest and best, but they have seen their young people leave the farms and small communities and go to the cities, and they have learned that when these young people reach the cities their health will be protected by sanitary measures and modern medical services. They have learned from association with their city relatives and friends of experiences whereby cities have been able to check and control disease and bring about improvement in medical care, such as the purifying of water, pasteurization of milk, providing sanitary conditions in their homes and establishing good hospitals and clinics where everyone may secure the best of medical care. Rural people have not been slow to recognize these factors that affect health.

Through the years farmers have recognized:

1. That tuberculosis in their livestock was a dread economic scourge, but when they learned of the relationship between tuberculosis in livestock and human beings they then took the necessary steps through cooperative effort with the medical and veterinary professions, with the result that tuberculosis in livestock has been virtually eliminated. Today they observe the results of this program by the reduced number of cases and types of tuberculosis in human beings in their respective communities.

2. In more recent years dairymen realize the great economic loss to them as the result of contagious abortion in their herds, but they recognize the close relationship between contagious abortion in animals and undulant fever in humans. They have been pursuing an active, aggressive campaign for the eradication of contagious abortion in their herds with the result that where this disease has been eliminated in dairy herds there has been a decline in the cases of undulant fever in humans.

3. It was not, however, until reports of army rejection came out that rural people began to seriously doubt their health advantages when the figures revealed that farmers had the highest rate of rejection of any group. The results of selective service of medical examinations of rural youth has caused rural people to have a greater interest than ever in the problems of improved conditions for better health rurally.

4. The development and extension of prepaid hospital plans, and, in some instances, prepaid medical care plans, has done much to bring home a remedy for some of the problems. In prepaid care plans organized on the cooperative basis they have found that by averaging out the hospital and medical costs over a long period and over

XUM

a large group the cost when applied by this method, rather than when sickness strikes, is not so heavy or unbearable.

Membership in farm organizations is demanding action through their leadership in an organized way. The larger farm groups, such as the Farm Foundation and the American Farm Bureau Federation, have for some time had committees at work studying and analyzing the health problem. Only by exact information arrived at in this manner can a definite policy be arrived at as to the rural health problem. These committees have been meeting with every group dealing with the rural health situation.

At a joint meeting of the Medical Care Committee of the American Farm Bureau Federation, with a representative committee of the American Medical Association, it was informally agreed during the discussion on July 12, 1945:

1. That the American Medical Association endeavor to have State medical associations cultivate better working relationships with the State Farm Bureaus.
2. That all committees, national, state or community, selected or appointed concerning state health activities, have qualified farmer representatives included.
3. Work with medical profession in combating socialized medicine by promoting an aggressive, constructive program.
4. Determine the need of factual basis after thorough consideration and research of the need for hospital and medical services with particular reference to rural areas.
5. That the American Farm Bureau Federation and the state federations be leaders in working out plans for wise, effective use of public funds for improvement of public health in rural areas with emphasis on local participation and local control.
6. That some plan be worked out for providing scholarship or loan funds for worthy rural youth to make it possible for them to study medicine with or without agreement to return to the country for practice. Interstate collaboration in medical education of students from states in which there is no medical school.
7. One of the problems in medical care for rural people is payment. We urge the development of prepayment medical and hospital care on a sound actuarial basis without subsidy.

The Associated Women of the American Farm Bureau, representing a million homes, have adopted the following policy:

"One of rural America's most urgent problems is to provide a program to bring about better facilities in rural areas for hospitals, medical care and improved health. It will take the combined efforts of the medical profession and rural people to solve the problem.

"The solution must provide for comprehensive health education, for well trained doctors, dentists, nurses, technicians and laboratory scientists, as well as the establishment of Public Health Centers, hospitals and clinics accessible to all sections of rural America.

"The care of our former service men and women, of the mentally sick and the indigent and the control of communicable disease is a public obligation and should be supported from public taxation. In some communities, after careful surveys it

may be found advisable to use Federal grants-in-aid to assist groups to erect and equip hospitals. These must be controlled by the local people themselves.

"We believe in the extension of voluntary group prepayment services on some type of an insurance plan that provides greater flexibility and would be more likely to succeed over a wide area than rigid uniform plans on a compulsory basis. We believe that a plan which will provide for prevention as well as curative measures and the right of the free choice of doctors should be zealously guarded."

Some of the problems in connection with the development of a better health program for rural people are:

(1) Shortage of doctors in rural areas where medical care is most needed. The problem now is how to alleviate this situation.

(2) Greater need for hospital and medical facilities in rural areas to attract well-trained medical men, thereby providing better medical services.

(3) The need of a development of the philosophy of the possibilities to professional medical men in rural practice.

(4) A greater development in prepaid hospital care plans, thereby providing the incentive for medical care.

(5) The development of prepaid medical care plans as a means of averaging the cost and placing medical care on an annual service and cost basis.

J. S. JONES.

* EDITOR'S NOTE: Mr. Jones of St. Paul is Executive Secretary Minnesota Farm Bureau Federation and member of the National Committee of Rural Health. He is also on important committees of the Farm Foundation, and a Regent of the University of Minnesota.

Floral Eponym (38)

GREWIA

NEHEMIAH GREW, 1641-1712.

Grew was born in Warwickshire England in 1641, and graduated at Cambridge in 1661. He took his M.D. at Leyden in 1671. He then settled in London as a practitioner, where he became secretary of the Royal Society. In 1682 he published his famous *Anatomy of Plants.* Haller styled him "an industrious observer on nature in every direction", who was probably the first to consider the existence of sex in plants.

Grewia is a large genus of tiliaceous shrubs and trees found chiefly in the tropics of the old world. Two or three are slightly cultivated in Southern Florida. The fibrous bark of some species is used for making nets, while the wood of others, as G. *elastica,* is valuable. The fruit is used in India for flavoring drinks or sherbets.

XUM

A NEW AND SIMPLE PROCEDURE FOR DEVELOPING ESOPHAGEAL VOICE IN THE LARYNGECTOMIZED PATIENT*

E. TRIBLE GATEWOOD, M.D.,
Richmond, Virginia.

The incidence of laryngeal cancer is much greater than mortality statistics indicate. It is estimated that four per cent of all malignant tumors of the body occur in the larynx, and that only one and one-half per cent of cancer deaths are due to lesions of this organ.

As total extirpation of the larynx is performed more and more often, it becomes necessary that the laryngologist interest himself more and more in the problem of esophageal speech. In the past decade the literature pertaining to laryngeal malignancy has been very extensive. However, with few exceptions little consideration has been given to the development of voice in the patient without a larynx. The immediate training and production of a pseudo-voice of a laryngectomized person is now recognized as an integral part of the management of this disease, and the patient may not be completely dismissed until every possible opportunity has been given to acquire a new speech.

It is often stated that cancer of the larynx is on the increase, and that approximately eighty per cent of such lesions originate on the vocal cords, and in most instances give adequate warning.[1] If this statement is true, a much larger number of early cases should be seen by the laryngologist than is being seen today. According to some authors laryngectomy is performed three times as often as laryngo-fissure operation. It is generally conceded, however, that only twenty per cent of persons with laryngeal malignancy when examined are suitable for laryngo-fissure operation, while forty per cent require total extirpation, and that the rest may be regarded as inoperable. The layman can easily diagnose hoarseness and the laryngologist can just as easily analyze the cause of the symptom, yet malignant cord lesions are too infrequently seen until the danger signal has lost most of its virtue.

The question may be asked, is not life expectancy short after laryngectomy? The answer is quite relative. Age and body condition apart from the cancer are important factors. The immediate operative mortality is low, though, conversely, the recurrence incidence is estimated at fifty per cent. This, of course, varies with the individual operator's criteria used in selecting patients for operation. When the lesion requires total extirpation of the larynx and the patient is so informed, he not only thinks of the operative risk and the uncertainty of being permanently cured, but also of the total loss of his voice. While this phase of the situation is secondary, it is a most important consideration to the patient. Until it is explained in detail that a new way of talking can be developed, he is profoundly affected.

Fig. 1. Illustrates iodized cotton plug placed in esophagus attached to string, to block gastric air and to localize esophageal air chamber by gliding movements.

The laryngologist, of course, gives more thought to the diagnosis and extirpation of cancer than he does to restoring the function that the organ performed. It has only been in recent years that a few American laryngologists have made a concerted effort to restore to these patients a voice which may be his own. In many instances the physician may feel that his responsibility is ended when he dis-

From the Department of Otolaryngology, Johnston-Willis Hospital and the Medical College of Virginia.

*Presented before the Southern Section of the American Laryngological, Rhinological and Otological Society, Charlotte, N. C., January 15, 1945.

charges the patient from the hospital and request that he use an artificial voice box. A large number will do this, and make the best of it, while others will be too sensitive or discouraged to avail themselves of its use.

The artificial larynx is serving a good purpose in many instances. However, when it is considered in conjunction with esophageal speech the disadvantages are too numerous to elaborate upon in this paper. Jackson received 30 replies to questionnaires sent laryngectomized patients, and to these only 18 replied "yes" to the question, "Have you learned to speak without your larynx?"[2] Wright stated in a splendid paper published in 1942 summarizing ten laryngectomies, "One patient has developed an excellent stomachic voice, and the others have an audible and understandable whispered voice. All have learned to use the artificial larynx."[3]

Curing the patient is, of course, first consideration in dealing with cancer. However, voice development is of considerable concern to the patient if he attempts to regain his former economic and social station in life. When the patient leaves the hospital he is usually cheerful and grateful, but I am sure in a deeper sense he is profoundly impressed with the fact that he is isolated from normal social life and unsuitable for employment. The first problem is to rehabilitate the patient psychologically, and, second, physically.

There are on record certain ingenious patients who have produced good vicarious voices, either by chance or self instruction. Conversely, there are others who have extreme difficulty in grasping the idea of vocal gymnastics, and are unable to execute the mechanism in an effective manner. There are several factors which influence the development of esophageal voice: (1) The will of the patient to learn is especially essential, and (2) the encouragement and confidence that may be imparted to the patient by one who has had a like operation, and has acquired a satisfactory voice. The psychology of voice production is an interesting study and perhaps it is based upon conjecture and results in an unknown quantity. Our present knowledge of nerve control of involuntary action is also necessarily limited.

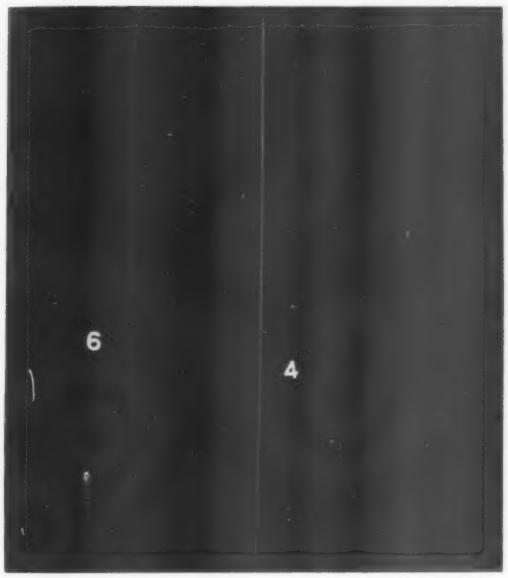


Fig. 2. Size of catheters used.

Fig. 3. Shows usual depth of catheter inserted in esophagus to aid the beginner.

It is not entirely clear what influence operative technic has upon a substitute voice. Gutzmann thinks the voice is largely dependent upon the individual anatomic construction of the upper esophagus and hypopharynx.[3] Stern says, "The glottis location probably depends upon the conditions created in the

operation, and is of great importance to the success of speech."[7] Total extirpation of the epiglottis has shown no derogatory effect upon voice development, nor has the voice shown any superior quality in those patients whose epiglottis was not removed. The technic we have followed has omitted the removal of the hyoid bone. Some operators remove this bone routinely, and I have heard of no adverse effect upon voice development. It does seem that partial resection of the anterior ribbon muscles impairs the antagonistic action of the sphincter fibers of the esophageal orifice. We have had one patient on whom we did a laryngo-fissure operation and later a laryngectomy. The anterior ribbon muscles were partially removed because of recurrence and leakage through the cartilage. This patient had much more difficulty in developing a voice than did the average patient, in spite of his enthusiasm and determination. Another patient who had a post-cricoid lesion and required partial resection of the upper esophagus in addition to the laryngectomy, resulted in a very restricted esophageal lumen. She is acquiring esophageal voice and it will be interesting to note the end result of her speech.

The physical requirements for a substitute voice are an air chamber and a glottis capable of vibrating. It is possible that different patients may develop a new glottis in different areas. However, an esophageal orifice should lend itself well to the necessary contracting mechanism of which adjacent structures may be less capable. It occurred to me that if air could be piped below the "would-be glottis" it might aid the patient in forming an air column with sufficient pressure to induce glottic vibrations. Then muscular coordination could be induced by vocal gymnastics. In order to do this a small semi-flexible catheter not larger than a number six is inserted through the nose into the esophagus with its distal end resting in the upper third of the esophagus. The catheter is then anchored to the tip of the nose for placement. By attaching a bulb to the proximal end, air is furnished the esophagus by gentle pressure. My first trial of this method was on a patient who had considerable difficulty in aspirating air or belching. By persistent effort the patient was induced to relax upon prolonged expiration and at the same time compress the bulb rapidly and gently. By repeating this procedure many times sound was eventually attained. I felt encouraged, and so did the patient. He immediately indicated that it helped him to develop the sound. I was then concerned about the possible effect the caliber of the tube would have upon the esophageal vibrators in a finer sense of tone development, so I then summoned a former laryngectomized patient to my office who had achieved an excellent esophageal voice and I tried the experiment upon him. With the catheter inserted in the esophagus, I learned that there was no change in his tone or articulation. Larger catheters

Fig. 4. Shows method of piping air into the esophagus.

were experimented with later, but they soon proved to be obstructive. In some beginners I have used a number four catheter with satisfactory results, though I have found that a size six is more effective and it is very well tolerated.

The esophageal glottic folds are assumed to be very flaccid in contrast to vocal cords, and the insertion of a fine catheter does not seem to interfere with their approximation or vibrations. This procedure seems particularly helpful to the beginner until he can at least partially acquire an air chamber or is able to exercise better glottic control. While the tube has a very distinct practical value it also has a definite psychologic effect. The patient is

immediately encouraged when he experiences the sensation that he is definitely aided in making a sound when air is supplied the tissues that are capable of vibrating. This inflow of air is equivalent to esophageal inspiration and its action may be likened to a synthetic lung.

Expiratory pressure serves to help accelerate the column of air during the practice of phonation contractions. By repeated vocal efforts, vibratory quality and tension of the soft tissue folds are gradually acquired. During the early process of learning and before voluntary control is demonstrated, the use of the tube serves its greatest usefulness by supplying air free of effort to the inexperienced glottis, which lacks the help of an organized air chamber. In other words, the use of the tube acts as an artificial air chamber and aids the patient in practice, while acquiring muscular control. Once this is accomplished, the formation of an air chamber below the vibrators should follow. Unpleasant sensations may develop and action may be impeded if too vigorous use is made of the air. During the earliest phase of voice production, the act of supplying the esophagus with air by the patient alone seems to be the most difficult part of acquiring a new speech mechanism. Seemann states, "Once the patient masters the mechanism of voluntary aspiration of air the rest of the speech process is easy."[4] Stetson also says, "Using the constriction of the esophagus is a novel experience, but it does not clash with previous habits of the patient as does this intake process."[5] Roentgen studies made on certain patients of ours, who had acquired a fair degree of esophageal speech, corroborated the observations previously reported by Gutzmann,[6] Morrison,[8] and others, that the constricted esophageal area is the logical tone producing site. The average laryngectomized patient can master a whispered voice without practice or effort. It should be discouraged from the outset, as it makes for faulty habits in developing an understandable speech.

Eructation may be encouraged at the outset and it serves a good purpose in getting the patient started. However, some patients continue the so-called "gastric voice" which is produced by gulping air into the stomach and expelling it with a "clang of a churn." In this instance the act is accompanied by considerable effort and noise. McCall points out that preoperative training in belching is much desired and it will enhance the patient's ability to develop a better voice.[9]

The most perfect pseudovoice is usually exhibited by those who develop the very frequent nerve cell habit of inspirating small quantities of air in the esophagus between their words or sentences with no obvious effort. They often attain a fine degree of modulation and frequently a range of one to one and a half octaves. Patients who can accomplish such a voice may return to their former station in life with a certain degree of satisfaction.

REFERENCES

1. Gatewood, E. Trible: Diagnosis and Selection of Treatment for Carcinoma of the Larynx. *Virginia Medical Monthly* **68**:330-335 (June), 1941.

2. Jackson, C. L.: The Voice After Direct Laryngoscopic Operations—Laryngofissure and Laryngectomy. *Archives of Otolaryngology* **31**:33-36 (January), 1940.

3. Wright, Edward S.: Diagnosis and Treatment of Cancer of the Larynx. *Annals of Otology, Rhinology and Laryngology* **51**:228 (March), 1942.

4. Seemann, Mil.: Phoniatrische Bemerkungen Zur Laryngektomie. *Arch. Klin. Chir.* **140**:285-298, 1926.

5. Stetson, R. H.: Esophageal Speech for Any Laryngectomized Patient. *Arch. Otolaryng.* **26**:132-142 (August), 1937.

6. Gutzmann, Hermann: Ueber die Aesophagusstimme bei Laryngektomierten. *Deutsche Med. Wchnschr.* **51**:520-5, 1925.

7. Stern, Hugo: Grundprinzipien der Sprach und Stimmausbildung bei Laryngektomierten nebst einem neuen Beitrag zum Mechanismus der Sprache und Stimme derartig Operierter. *Wien. Klin. Wchnschr.* **33**: 540-541, 1920.

8. Morrison, Wallace: Physical Rehabilitation of the Laryngectomized Patient. *Archives of Otolaryngology* **34**:1101-1112 (December), 1941.

9. McCall, Julius W.: Preoperative Training for Development of the Esophageal Voice in Laryngectomized Patients. *Annals of Otology, Rhinology and Laryngology* **52**:364-376 (June), 1943.

Professional Building.

XUM

TRAUMATIC LOOSE BODIES FROM THE PATELLA*

GEORGE A. DUNCAN, LT. COL., M.C.,
Norfolk, Virginia.

During the past year the author has encountered five cases of loose bodies in the knee joint, whose origin was from the articular surface of the patella and are probably chip fractures. In every instance in this small series an injury has been the causative factor, and none of these patients had any complaint relative to their knee until the admitting injury. The knee joint was "locked" in every patient on admission to the hospital. Roentgenograms failed to show a defect in the patella and the loose body of fractured fragment was so hidden that it was detected pre-operatively in but one patient. Even following removal of the loose body and re-examination of the roentgenograms it was difficult to find an area of increased density representing the fragment in the joint. Case reports of these five patients follow:

CASE REPORTS

Case 1.—Pfc. G. T., white, aged 21 years, was admitted to the hospital 6 April 1944. Patient stepped in a hole, twisting his left knee, while playing football 29 March 1944, on the beach at Anzio, Italy. He fell to the ground and was unable to straighten his left knee. This knee was moderately swollen, tender over the medial aspect of the joint and the knee was "locked" in 15 degrees of flexion. An exploratory arthrotomy of his left knee was done 7 April 1944 and revealed in the joint cavity a loose body that was irregular in shape and consisted of bone and cartilage. The medial meniscus was loose. No other pathology noted. The loose body and medial meniscus were excised. Convalescence was uneventful and he returned to limited service 2 June 1944, with motion in his knee from 180-70° with pain.

Case 2.—Pvt. E. F. F., white, aged 23 years, was admitted to the hospital 28 June 1944. Patient struck his toe against a stump, stumbled and fell, twisting his left knee, 1 June 1944 in Italy. He had pain, swelling and was not able to fully extend his left knee and entered another hospital, before being transferred here. On admission, there was moderate swelling, no areas of particular tenderness, the left knee was "locked" in 10° flexion. Exploratory arthrotomy done 4 July 1944, and the only pathology found was a loose body that had been fractured from the articular surface of the patella. Convalescence was uneventful and he was discharged to limited duty, 11 September 1944 with motion in his left knee from 180-90 degrees, with occasional pain in his knee.

Case 3.—Cpl. B. C. H., white, aged 19 years, was admitted to the hospital 24 July 1944, having been transferred from another hospital. Patient fell and twisted his left knee while playing baseball 4 July 1944 in North Africa. On admission there was moderate swelling of his left knee, and motion in his knee was 165-90°, with marked pain and muscle spasm on attempting to extend his knee. An exploratory arthrotomy was done on his left knee 29 July 1944. A fractured fragment of bone and cartilage from the articular surface of the patella was removed from the joint cavity. No other pathology was found. Convalescence was normal and he was discharged to duty at a Convalescent Center, 4 September 1944.

Case 4.—Pvt. H. F. M., white, aged 20 years, was admitted to this hospital 3 November 1944. Patient slipped, twisting his left knee and fell while stringing wire 17 October 1944 in Italy. Admitted to another hospital where plaster cast was applied and removed when patient was transferred to this hospital. The left knee was moderately swollen, and full extension was not possible and reproduced pain, referred to the center of the joint. Flexion was possible to 100°. There was also tenderness over the medial meniscus. Exploratory arthrotomy was done 11 November 1944 at which time, the medial meniscus was found to have a bucket handle tear, and there was a loose body on the lateral aspect of the knee. Medial meniscus and loose body were removed. Convalescence was uneventful and patient sent to duty at a Convalescent Center, 29 December 1944.

*This paper was written while the author was still in the Army, as a member of the 45th General Hospital.

Case 5.—Pvt. H. L. J., white, aged 22 years, was admitted to the hospital 4 January 1945. Patient had a sudden pain in his left knee, while kicking a football, 16 December 1944, in Italy. Admitted to another hospital where he remained, with knee at rest until transfer here. There was moderate swelling and tenderness about the entire anterior half of the knee. Motion present was from 170-100 degrees, with pain at these extremes. Roentgenograms showed a calcific nodule in the joint space. Exploratory arthrotomy done 6 January 1945, revealed a fractured fragment of cartilage and bone which originated from the articular surface of the patella, which was excised. There was no other pathology. Convalescence was uneventful except that he still had a slight limp, but motion in his knee is 180-80°. Discharged to limited duty 15 February 1945.

DISCUSSION OF CASES

In all of these cases an indirect injury or twisting of the knee occurred. A fall when it occurred following the twisting was not a violent one. The disability that followed was immediate and continuous until operation. Disability consisted of pain, swelling and "locking" of the knee.

The symptoms and signs in all these cases indicated an internal derangement of the knee. The derangement was thought to be due to a dislocation of the internal meniscus in all but one case, where there was evidence of a calcific mass present in the joint. There was an associated dislocation of the internal meniscus in only one case and a loose meniscus in another, with an associated loose fractured fragment. All these patients had a period of bed rest for at least a week following their injury, with persisting acute symptoms and signs in their knee.

There was no thickening of the synovium, or significant atrophy of the quadriceps muscle, probably because of the acuteness of the lesion. Pain was not a localizing factor. As mentioned before, but will bear repeating, roentgenograms were negative except in one case where a calcific mass was seen. There was no thickening of the patellar fat pad, nor was there any pannus formation in the joint.

The only gross pathology noted at operation was the loose fragment of bone and cartilage in the joint, that had been fractured and extruded from the articular surface of the patella.

COMMENT

The lesions just reported in five patients were acute and believed to be traumatic in origin. There was no history of any difficulty with their knees prior to injury. I cannot explain in just what manner this lesion or fracture occurs. At time of operation, there was none of the inflammatory reactions found to suggest an osteochondritis, as are usually found in association with somewhat similar lesions. The operative treatment is quite simple; localizing and extracting the loose body. All of these patients have returned to either full or limited duty in 4 to 9 weeks. It is too early to state whether any arthritic symptoms will develop later but they have made a satisfactory early recovery and this should preclude its formation.

This lesion is not a frequent finding in knees with internal derangement, and it behooves the operator to make a thorough inspection of the knee before doing any definite surgery. This will remove the chances of overlooking a loose body, particularly in addition to an injured meniscus. Negative roentgenograms cannot always be trusted to relieve the operator of his responsibility of making a thorough investigation of the knee joint.

300 Wainwright Building.

XUM

DIVERTICULA OF THE JEJUNUM—WITH REPORT OF TWO CASES*

CARRINGTON WILLIAMS, M.D., F.A.C.S.,
and
JOHN B. WALKER, M.D.,
Richmond, Virginia.

Diverticula occur in all parts of the digestive tract, being most frequently found in the left colon and diminishing in frequency upward to the stomach. Such diverticula as patent branchial clefts and Meckel's diverticula are remnants of embryonic structures which normally are obliterated. Others throughout the tract are either congenital malformations or acquired pouches.

The congenital or true diverticula are thought to be due to abnormal embryonic development. They

Fig. 1—Case 1. Roentgenogram showing diverticulum in the upper part of the jejunum.

contain all of the layers of the gut from which they spring.

The acquired or false diverticula are thought to be due to herniation of the mucous membrane of the gut through a weak spot in the wall of the gut. This spot is usually along the course of a nutrient blood vessel and the weakness at this spot may well be due to abnormally large tracts for the vessel due to abnormal embryonic development. This minute weak spot in the gut wall may be compared to the infinitely larger weak spot at the umbilicus which results in hernia.

The presence of diverticula in the jejunum is exceedingly unusual. About 300 cases have been reported. They are most often found along the mesenteric border of the bowel and may be included in the leaves of the mesentery. Occasionally they are single but more often are multiple and may occur in large numbers. They are fortunately located in

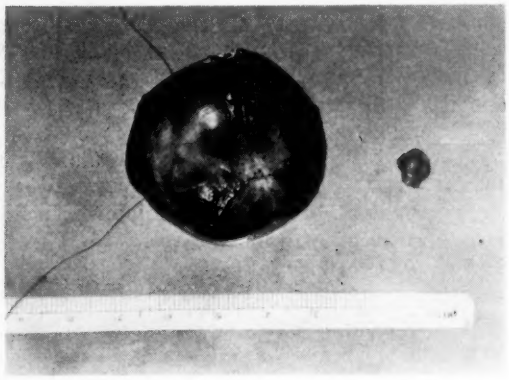


Fig. 2—Case 1. Photograph of diverticula.

a definite segment of the bowel. The size of the pouch is very variable; some are minute, others quite large. The opening from the pouch into the gut also may be relatively small or large. In general, the single diverticula are larger than the multiple.

The wall of the true diverticulum contains all of the layers of the bowel but some of the layers, notably the muscle layers, may be attenuated.

As in other parts of the intestine, the mere presence of diverticula does not result in abnormal function, so that there is no manifestation of their presence until some complication develops. The symp-

*Read at the Richmond Academy of Medicine, November 13, 1945.

toms which develop may be acute or chronic. When the diverticula become acutely inflamed the symptoms of acute abdominal inflammation develop, and the inflammation may result in perforation with local or general peritonitis. This inflammatory process results in abdominal pain, nausea, vomiting, fever, distention, muscle spasm or rigidity, and leucocytosis. The location and severity of the symptoms and signs are variable but they are most frequently in the upper abdomen. After perforation the picture would be similar to other acute peritoneal inflammations and vary according to the extent of the process and to the success of localization.

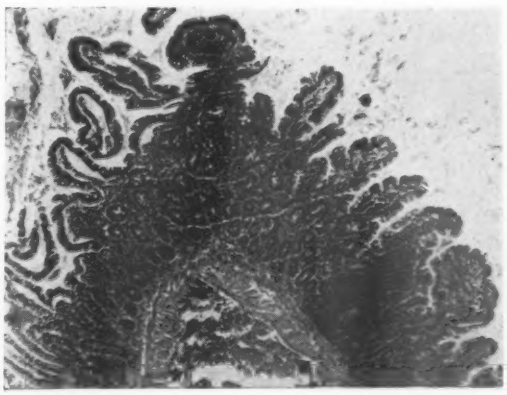


Fig. 3—Case 1. Photomicrograph of wall of diverticulum.

The chronic cases are even more variable in their manifestations. If the inflammation results in considerable infiltration of the neighboring bowel, symptoms and signs of partial obstruction may be present. If diverticula become filled with intestinal contents and empty poorly, vague pains, flatulence, and intestinal disturbances occur. There is no characteristic picture to guide one to the diagnosis except x-ray demonstration of the diverticula. This examination is contraindicated in acute inflammation and is not always successful in the chronic cases.

The treatment is surgical. When there is only one diverticulum or when several are present and are sufficiently separated, excision of the pouch or pouches may be done. When they are numerous or located very close together the segment of the bowel involved should be resected. In the acute cases the inflammation may be so severe as to make excision or resection too hazardous; then proper drainage and treatment with a sulfonamide or penicillin should be instituted.

The following cases illustrate the acute and chronic pictures developing from jejunal diverticula:

Case I.—Mr. E. E., age 47, was admitted to the Medical College of Virginia Hospital on December 8, 1944. He complained of pain in the upper part of the abdomen and a feeling of fullness which he has experienced for the past several years. This discomfort was present more particularly after eating but came also at other irregular intervals. In 1932 x-ray examination of the gastrointestinal tract at another hospital was reported to be negative. Five months before admission he had an attack of severe diarrhea which has continued off and on ever since. Re-examination of the gastrointestinal tract by x-ray revealed a diverticulum in the upper part of the jejunum. Recently there has been a considerable amount of tenderness in the right upper abdomen.

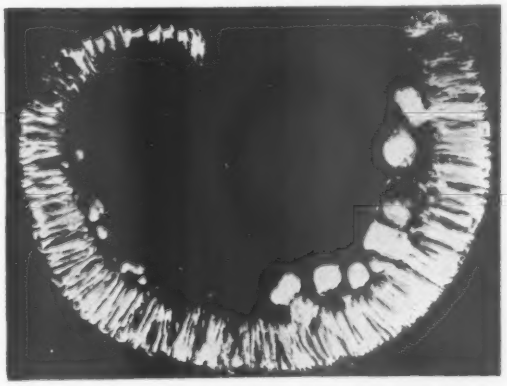


Fig. 4—Case 2. Roentgenogram of removed segment of jejunum after injection of barium mixture.

Physical examination was essentially negative except for the tenderness on deep pressure in the right upper quadrant of the abdomen. Blood and urine examinations were negative. Removal of this diverticulum was advised and he was operated upon on December 9, 1944. At operation one large and one small diverticula were found. Both opened into the jejunum on the anti-mesenteric border and each opening was small. The diverticula were excised and the defect in the jejunum was closed with a purse string suture. Patient's recovery from the

XUM

operation was uneventful and he has been entirely relieved from the discomfort, distention and diarrhea.

The pathological report on the diverticula stated that the walls contained all of the layers of normal jejunum, including two layers of muscle.

Case II.—Miss E. B., female, age 59, was admitted to the Medical College of Virginia Hospital on December 15, 1941. She complained of severe cramp-like pain in the abdomen of 24 hours duration. Four hours before admission the pains became very much more severe and were accompanied by

Fig. 5—Case 2. Photomicrograph of wall of diverticulum.

nausea and vomiting. There had been no bowel movement for 24 hours. Her past history revealed that appendectomy and resection of the right ovary was done in 1917; cholecystectomy and gastroenterostomy were done in 1918. The last operation was done on account of ulcer of the stomach. She was entirely relieved of her complaints by these operations and has remained well until the present illness.

Examination showed an acutely ill patient. Temperature 102°; pulse 80; respiration 20. Examination of the abdomen showed it to be greatly distended, tender throughout, especially in the right lower quadrant, and tympanic. No mass was felt. On pelvic examination a mass could be felt to the left of the uterus about 4 inches in diameter and quite tender. Diagnosis was ovarian cyst, strangulated by a twisted pedicle, and immediate exploration was advised.

The abdomen was opened by a low incision and bilateral ovarian cysts with twisted pedicles were found. These were removed with the uterus and further exploration revealed an inflammatory mass above and to the left of the navel. The incision was extended and the inflammatory mass was found to have resulted from a perforation of one diverticulum which was well walled off by adjacent loops of bowel. A large number of other diverticula were seen along the mesenteric border in a segment of jejunum about 24 inches in length. The perforated diverticulum was excised and the small defect in the bowel wall was closed with a purse string suture. Patient made a very satisfactory recovery following operation and returned to the hospital about six weeks later in good condition for resection of the segment containing the diverticula. This operation was done on July 22, 1941. The segment of jejunum containing the diverticula was excised and an end to end anastomosis was made. She again recovered uneventfully and has remained well since that time.

The pathological examination showed that the wall of the diverticulum corresponded to the wall of the jejunum and contained all of the layers found in normal bowel.

These cases represent the congenital type of diverticula because all of the layers of the bowel wall were present in the walls of the diverticula. Case II further indicates one serious complication which may occur when they become acutely inflamed. Case I represents the vague picture of a chronic disorder and the relief which may be expected by removal of the cause.

SUMMARY

The condition described is rare, there being only about 300 cases reported.

The clinical picture resulting from inflammation or irritation may be acute or chronic.

The diagnosis cannot be positively made before operation unless the diverticula are demonstrated by x-ray examination.

The treatment is removal of the diverticula either separately or by resection of the segment of bowel involved unless the acute inflammation is so severe that the procedure would be too hazardous. In the latter case drainage or other appropriate treatment for peritonitis should be instituted and the bowel resected later.

BIBLIOGRAPHY

1. Rudder, F.: Acute Diverticulitis of Jejunum—Case. *Surgery* **14**:921-923, December, 1943.
2. Dixon, C. F., and Waugh, J. M.: Non-Meckelian Diverticula of Jejunum and Ileum. *Ann. Surg.* **118**: 377-393, September, 1943.
3. Van Ravenswaay, A. C., and Winn, G. W.: Jejunal Diverticula—Consideration of Clinical Symptomatology and Case Report. *Am. J. Digest. Dis.* **10**: 108-111, March, 1943
4. Edwards, H. C.: Diverticulosis and Diverticulitis. *Practitioner* **149**:145-150, September, 1942.
5. Levitt, A., and Goldstein, K.: Diverticulosis—Analysis of 86 Cases. *Rev. Gastroenterol.* **8**:439-446, 1941.
6. Kozinn, P. J., and Jennings, K. G.: Jejunal Diverticulitis Occurring in 2 Year Old Girl. *Am. J. Dis. Child.* **62**:620-623, September, 1941.
7. Schunk, P. M.: Traumatic Rupture of Jejunal Diverticulum. *Rocky Mountain M. J.* **30**:327-328, May, 1939.
8. Bunch, G. H.: Congenital Factor in Acquired Diverticulosis of Jejunum and Ileum. *South. M. J.* **32**: 919-921, September, 1939.
9. Turner, P.: Multiple Diverticula of Jejunum—Case. Guys' Hospital Rep. **89**:32-46, January, 1939.
10. Hubeny, M. J.: Diverticulosis of Small Intestine—Case with Intestinal Obstruction. *Am. J. Roentgenol.* **40**:689-694, November, 1938.
11. Gerster, J. C. A.: Diverticula of Jejunum. *Ann. Surg.* **107**:783-800, May, 1938.
12. Guthrie, D., and Brown, M. J.: Diverticula of Proximal Intestine, Duodenum, and Jejunum. *Am. J. Surg.* **40**:128-139, April, 1938.
13. Larson, E. M.: Multiple Diverticula of Jejunum. *West J. Surg.* **46**:127-131, March, 1938.
14. Johns, F. S.: Diverticula of Jejunum with Case Report. *South. Med. and Surg.* **99**:265-268, June, 1937.
15. Guthrie, D., and Hughes, F. A., Jr.: Diverticulosis of Small Intestine—3 Cases. *Surgery* **1**:595-607, April, 1937.
16. Rosedale, R. S., and Lawrence, H. R.: Jejunal Diverticulosis. *Am. J. Surg.* **34**:369-373, November, 1936.
17. Edwards, H. C.: Diverticulosis of Small Intestine. *Ann. Surg.* **103**:230-254, February, 1936.
18. Jones, T. J., and Crile, G., Jr.: Diverticula of Jejunum. *Am. J. Digest. Dis. and Nutrition* **3**:120-122, April, 1936.
19. Rosedale, R. S.: Jejunal Diverticulosis. *Surg., Gynec. and Obst.* **61**:223-228, August, 1935.
20. Levy, J. S., and Degroat, A.: Jejunal Diverticula—Review of Literature and Report of 2 Cases. *Am. J. Digest. Dis. and Nutrition* **1**:708-713, December, 1934.
21. Rankin, F. W., and Martin, W. J.: Diverticula of the Small Bowel. *Ann. Surg.* **100**:1123-1135, December, 1934.
22. Abell, I.: Diverticulosis and Diverticulitis of Small Intestine. *Am. J. Digest. Dis. and Nutrition* **1**:193-196, May, 1934.
23. Chapman, J.: Diverticulosis of Small Intestine—Report of a Case, and Review of Recent Literature. *Ann. Int. Med.* **7**:1376-1390, May, 1934.
24. Schmidt, E. A., and Guttman, P. H.: Multiple Diverticula of Jejunum and Duodenum Simulating Gastric Diverticula and Complicated by Cholelithiasis. *Am. J. Roentgenol.* **31**:200-203, February, 1934.
25. Briggs, P. J., and Hurst, A. F.: Diverticulum at Duodeno-Jejunal Flexure Simulating Radiologically a Gastric Ulcer. Guys' Hosp. Rep. **82**:106-113, January, 1932.
26. Biegler, S. K., Bloom, A. R., and Wruble, Jr.: Diverticula of Jejunum with Case Report. *Am. J. Surg.* **17**:109-110, July, 1932.
27. Duckett, J. W.: Diverticula of Small Intestine. *Texas State J. Med.* **28**:473-475, November, 1932.
28. Vorhaus, M. G.: Recognition of Some Less Common Diseases—Duodenal—Jejunal Diverticula. *J.A.M.A.* **94**:165-169, January, 1930.
29. Boling, J. R.: Multiple Diverticula of Small Intestine. *J.A.M.A.* **95**:267, July, 1930.
30. Miller, A M.: Isolated Diverticulum of Jejunum. *Am. J. Surg.* **11**:116-117, January, 1931.
31. Boling, J. R., Multiple Diverticula of Jejunum, with Resection. *J.A.M.A.* **96**:526-527, February, 1931.
32. Parker, C. A.: Duodeno-Jejunal Diverticulum. *Am. J. Roentgenol.* **10**:608-610, August, 1923.
33. Helvestine, F., Jr., False Diverticula of Jejunum. *Surg., Gynec. and Obst.* **37**:1-5, July, 1923.
34. Rothschild, N. L.: Diverticula of Jejunum. *Ann. Surg.* **82**:250-255, August, 1925.
35. Watson, C. M.: Diverticula of Jejunum—Case with Enterolith Causing Intestinal Obstruction. *Surg., Gynec. and Obst.* **38**:67-71, January, 1924.
36. Sheppe, W. M.: False Diverticula of Jejunum. *J.A.M.A.* **82**:1118-1119, April, 1924.
37. Swanberg, H., and Montgomery, E. B.: Solitary Diverticulum of Jejunum. *Radiology* **7**:144-148, August, 1926.
38. Fisher: Quoted by Rosedale.

805 West Franklin Street.

XUM

ROCKY MOUNTAIN SPOTTED FEVER

T. STANLEY MEADE, M.D.,
Richmond, Virginia.

The purpose of this paper is to bring to your attention a condition which is becoming more common each year. Throughout the United States there were reported 454 cases in 1944, 81 of these occurring in Virginia. It was not recognized in Virginia until 1930. Although it was first described a half century ago in the Rocky Mountains, the name is a misnomer in itself as this disease has now been recognized in 42 out of the 48 states (none reported in Maine, Vermont, Rhode Island, Connecticut, Michigan, Kansas), and in Canada and Mexico. Several cases were reported in and around Richmond last summer and I had occasion to see two of these (mother and son) that occurred in the same family at the same time.

Rocky Mountain spotted fever is an acute specific non-communicable disease caused by the virus-like organism Dermacentroxenus rickettsii, which is *transmitted* to the human being by an infected tick —either by biting or by being crushed with the fingers. Animal hosts are many, the most common offender being the rat, but others are: mice, squirrels, rabbits, woodchucks, dogs and sheep. It has been proven that the American dog tick, Dermacentor variabilis can transmit Rocky Mountain spotted fever. It is estimated that 1 to 11 per cent of all ticks are infected with Rickettsii.

The *incubation period* ranges from 2 to 12 days. During the prodromal stage of 1 or 2 days the patient is listless, anorexic and fretful. Shortly thereafter high fever (T. 104-5), chills, severe headache, restlessness, delirium, lumbar backache, muscle soreness, hyperesthesia, cough, constipation, epistaxes develop. The fever remains high 7 to 10 days with morning remissions, after which it gradually falls by lysis in 2 or 3 weeks. However, the severe types may die by the 7th or 10th day. The *fatality rate* has varied from 5 to 20 per cent, with the very young and very old being the sickest. As a rule children are not as sick as adults. (This was certainly true with our mother and son cases.)

Anywhere from the 3rd to the 7th day after the onset of the disease *the rash,* which is the most characteristic feature of the condition, appears. In the beginning it is seen on the wrists and ankles and may be brought out or exaggerated by the tourniquet test. The rose colored macules at first disappear on pressure, but later these lesions become papular, darker red or purple in color, remain after pressure and may be easily palpated. If these spots remain pinkish and discrete the prognosis is good, but if they become dark purplish and confluent it is more grave. In protracted cases the rash may appear and fade away several times with each rise in temperature. The rash which started first on the wrists and ankles usually spreads on the extremities to the palms of the hands and soles of the feet and then to the body, chest and face. In the severe cases a purplish or brownish pigmentation remains for many weeks or months after convalescence. (The mother still had hers two months after recovery.)

Other *physical signs* may be: anxious expression, dusky complexion, stiff neck (20 per cent), Kernig's sign, meningismus and enlarged spleen. When the pulse, which may be slow at first, gradually gets faster and weaker and persists above 120 per minute, this is a bad prognostic sign as it denotes weakening of the myocardium.

I will not discuss the three *clinical types* other than to mention that there are mild, severe and fulminating cases. The most fatal cases have occurred in the West and fewer in the East so far.

The only constant *pathologic* findings are subcutaneous hemorrhages and enlargement and congestion of the spleen. The fundamental lesion is vascular, consisting of endothelial swelling, proliferation or even vascular occlusion, endothelial necrosis or thrombosis. Scrotal gangrene occurs occasionally.

Laboratory findings may clinch the diagnosis as the

(1) Weil-Felix reaction may be positive in agglutinations of B. proteus X 19 in dilutions of 1:240 or higher (however, this may be present in typhus fever also), first at the end of 2nd week or about 10th day.

(2) Guinea-pig inoculation with the patients whole blood (intraperitoneally) may reproduce typical symptoms in guinea pig and eventually kill the animal and autopsy verify the typical cutaneous and visceral lesions (virulent form only).

(3) Protection or virus-neutralization tests may help in convalescent stage only.

XUM

(4) Cross-immunization experiments with guinea-pigs and known strains of typhus and Rocky Mountain spotted fever may differentiate between the two when all else fails.

(5) The white blood cell count is not constant but is usually 8,000 to 10,000 in the first week and 15,000 to 18,000 in the second and third weeks (our cases both had 5,500 and one without sulfathiazole treatments). Relative mononucleosis (10-12 per cent) usually occurs.

(6) Urine is concentrated, highly colored, and may often contain albumin and casts.

(7) Complement fixation tests specific for typhus fever (7 days to 9 years ago) and not present in Rocky Mountain spotted fever.

(8) Biopsy of skin lesions may differentiate Rocky Mountain spotted fever from typhus fever.

Complications: pneumonia, phlebitis, hiccups, hemorrhage from the nose, intestine or kidneys; and, less commonly, iritis, acute nephritis and hemiplegia.

Concurrent conditions due directly or indirectly to ticks may occur, as streptococcic and septicemic infections, tularemia, and tick paralysis.

Diagnosis:

(1) Contact with ticks (biting or crushing), rodents and domestic animals (dogs especially).

(2) Occurs in endemic area in spring or summer.

(3) Rural communities or outdoor occupations.

(4) Characteristic rash—maculo-papular, pink or purplish, may come and go, and last 3 weeks to 3 months, involving entire body, including palms, soles and face. Starts on wrists and ankles.

(5) Laboratory findings, mentioned above, are very helpful.

(6) Prolonged fever (2-3 weeks) with morning remissions.

TREATMENT

I. *Specific*:

(1) Dr. Norman H. Topping's anti-Rocky Mountain spotted fever rabbit serum, in early stages, is quite dramatic—Dose= 1 c.c. per kilo of body weight (I.M.). He has used this treatment in

71 cases:	Mortality
52 cases (before 4th day of rash)	=3.8%=(2 deaths)
19 cases (after 4th day of rash)	=10% =(2 deaths)
untreated mortality (average)	=18.8%

(2) Penicillin—probably of no value.

(3) Convalescent serum—no good.

(4) Immune transfusions—no good.

(5) Sulfonamides made the condition much worse in guinea-pigs—(contraindicated).

(6) Intravenous therapy dangerous (damaged heart) regardless of drug used.

(7) Tyrothricin—not effective—experimentally.

II. *General*: Symptomatic and general supportive measures.

III. *Prevention*:

(1) Two *vaccines* may be used—(a) a phenol-formalized emulsion of ground-up infected wood ticks (Dermacentrox Andersoni) (Method of Spencer and Parker), or (b) Live virus or rickettsia cultivated in the yolk sac of the developing chick embryo (method of Cox). This latter is produced by the United States Public Health, Hamilton, Montana, as also by Lederle Laboratories. It is given free by Virginia State Health Department—two *doses* of 2 c.c. each, or three doses of 1 c.c. each, subcutaneously, 5 to 7 days apart; effects last one year only. It prevents mild type and keeps fulminating type from being so severe or proving fatal. Definite value in prevention for short time.

(2) Avoid tick infected areas (under-brush, etc.) in spring and summer.

(3) Dress to protect one's self—high boots, etc. Rarely found more than 18 inches above ground.

(4) Examine body twice daily (hairy portions especially).

(5) Fumigate clothes with carbon tetrachloride or use "DDT".

(6) Remove embedded tick with tweezers or paper, never with bare hands; and cauterize wound with fuming nitric acid.

Only positive findings are given for the sake of brevity.

Case Report—Summary of Findings:

(1) Visit to Drewry's Bluff—played with dog. No tick recognized.

(2) Onset of illness four days later in white boy of 5 years.

(3) High persistent fever with morning remissions occurred for three weeks and dropped by lysis.

(4) Rash appeared first on 7th day of disease and lasted about two weeks. Macules and papules appeared first on wrists and ankles and then spread gradually to entire body, involving the face, palms and soles. Color at first pink and never really dark red or purplish, as in 36 year old mother's case. (Sign of milder condition.)

XUM

(5) Palpable liver and spleen, development of cardiac murmurs with tachycardia and excessive weakness.

(6) Negative Wassermann, tuberculin, blood cultures, stool cultures, Widal and other agglutinations (typhoid, paratyphoid, tularemia, undulant fever, etc.) and no malarial parasites found.

(7) Positive Weil-Felix reaction in mother on 21st day of disease, associated with similar incubation and onset as with son—rash, febrile course but more severe symptoms and signs of nervous system involvement (meningismus, etc.) with severe lumbar backache and early menstrual bleeding. L. P. negative.

(8) Leukopenia in son and mother at first—5,500 WBC.

(9) Urine: Concentrated, dark colored, albumin present; granular casts, pus cells (3-6 WBC).

(10) Symptoms: Severe headache, sweating, drowsiness, listlessness, weakness, vomiting, constipation, fever, rash, delirium.

Summary:

1. Two cases of Rocky Mountain spotted fever in the same family at the same time were seen. The mother's symptoms developed within 48 hours of her son's onset.

2. The child's case was definitely milder than that of his mother.

3. The difficulties in reaching a correct diagnosis are emphasized and all obscure fevers of long duration have to be considered.

4. The rash is quite helpful but not pathognomonic. No other test is helpful until the 10th day or later, when the Weil-Felix reaction becomes positive for the first time.

5. Guinea-pig inoculation may be helpful in the long run but proved impractical in these cases.

6. Cross-immunization experiments with guinea-pigs and known strains of typhus and Rocky Mountain spotted fever may be the only sure way these two diseases can be differentiated.

7. Beware of tick pulling on your pet dog; it may be the rare carrier of Rocky Mountain spotted fever.

8. Complement fixation tests specific for endemic typhus fever from 7 days to 9 years ago are not present in Rocky Mountain spotted fever.

9. Biopsy of skin lesions by an expert may differentiate Rocky Mountain spotted fever from typhus fever.

10. Dr. Topping's new anti-Rocky Mountain spotted fever rabbit serum may be very dramatic and life-saving if used early enough.

REFERENCES

1. Spencer, R. R.: Rocky Mountain Spotted Fever. Brennamann's Practice of Pediatrics, Vol. II, Chapter 20 (recently revised 8-1-41).
2. Hutton, Jack G.: Rocky Mountain Spotted Fever. *J.A.M.A.* **117**:6, 413-5, August 9, 1941.
3. Bengtson, Ida A.: Complement Fixation in Endemic Typhus Fever. *U. S. Public Health Reports* **56**:13, 649-53, March 28, 1941.
4. Plotz, H., and Wertman, K.: The Use of the Complement Fixation Test in Rocky Mountain Spotted Fever. *Science* **95**:441, 1942.
5. Edmunds, P. D.: Penicillin in Rocky Mountain Spotted Fever. *R. M. Med. J.* **41**:910, 1944.
6. Topping, N. H.: *Public Health Reports* **58**:757, 1943.

913 Floyd Avenue.

New Books.

The following are among recent acquisitions at the Library of the Medical College of Virginia and are available to our readers under usual library rules:

Annals of Gynaecology and Paediatry. v.3.
Bodansky & Bodansky—Biochemistry of disease. 1945.
Dietz—Professional adjustments II.
Golden—Radiological examination of the small intestine.
Horsfall—Fungicides and their action. 1945.
Jackson & Jackson—Diseases of the nose, throat and ear.
Jensen—An introduction to sociology and social problems.
Morton—The human foot. Its evolution, physiology and functional disorders.
Nesbit—Transurethral prostatectomy.
Ochsner—Varicose veins.
Psychoanalytic study of the child. Various authors.
Salle—Laboratory manual on fundamental principles of bacteriology.
Smillie—Preventive medicine and public health.

ACUTE OSTEOMYELITIS OF THE SUPERIOR MAXILLA IN INFANTS

FRANCIS H. MCGOVERN, M.D.,
and
SAMUEL NEWMAN, M.D.,
Danville, Virginia.

Judging from the number of references in the literature, osteomyelitis of the superior maxilla in infants cannot be regarded as a rare disease. It is uncommon, however, and is frequently not considered in the differential diagnosis of acute inflammations of the face and orbit. Current interest is centered in the prompt response to penicillin therapy and the avoidance of sequestration and subsequent deformity.

Acute osteomyelitis of the superior maxilla is a disease peculiar to infancy and early childhood. The clinical course and physical findings are characteristic. A short prodromal period of fever and digestive disturbance is followed by evidence of severe infection—marked elevation in temperature, redness and swelling of the cheek, the infra-orbital region, and alveolar process on the involved side. Fistulas draining pus are later seen on the hard palate and alveolus. The presence of edema and swelling of the lids, chemosis of the conjunctiva, and proptosis of the globe denote extention into the orbit and formation of a periorbital abscess.

The following table, adapted from Magnus,[1] describes points in the differential diagnosis of osteomyelitis of the superior maxilla and orbital cellulitis:

OSTEOMYELITIS OF SUPERIOR MAXILLA	ORBITAL CELLULITIS
1. First 12 weeks of life—82 per cent within first month.	1. After six months usually.
2. Swelling of lids, canine fossa and hard palate.	2. Swelling of lids only.
3. Staphylococci.	3. Streptococci.
4. Proptosis of globe, chemosis of conjunctiva, ophthalmoplegia.	4. Same.
5. Fistula formation in alveolar process and hard palate.	5. None.
6. Sequestration—tooth may be extruded.	6. None.
7. Swelling and abscess formation in floor of orbit.	7. Swelling and abscess formation medial wall of orbit.
8. Nasal discharge, if present, unilateral.	8. Bilateral nasal discharge usually evidence of acute ethmoid and maxillary sinusitis and respiratory infection.

The etiology of osteomyelitis of the superior maxilla in infants has been ascribed to a variety of causes; the following factors have been mentioned in the literature:

1. Direct extension from antral empyema
2. Trauma to gums
   a. at birth
   b. daily cleansing of mouth
   c. nipple or pacifier
3. Trauma to maxilla during delivery
4. Infection from genital tract of mother.
5. Hematogenous
6. Infection starting around tooth buds.

Osteomyelitis of the maxilla in adults, which is a less fatal disease, is caused by dental infections, trauma to the maxilla, or follows operative procedures on the maxillary sinus.

In as far as the staphylococcus aureus is the usual causative organism in acute osteomyelitis of the superior maxilla in infancy, early recognition is imperative in order to take advantage of its sensitivity to penicillin therapy. Delay in diagnosis and treatment increases the extent of bony damage. Osteomyelitis of the maxilla tends to localize; in the case of osteomyelitis of the frontal bone, due to the anatomic arrangement of the venous drainage, the infection spreads over the cranial vault, and extends intracranially.

Case Report:—R. G., a month old infant, was hospitalized on October 2, 1945. The mother stated that on September 30 the baby seemed to be feverish and to have cramping pains in the abdomen. The next morning the temperature rose to 102°. She noted a slight puffiness of the left lower eyelid

and a watering of the eyes. The past medical history was negative. The baby was breast fed, but had been given a hard rubber nipple to use as a pacifier.

The initial examination showed a well nourished baby weighing 7 pounds 14 ounces. The temperature was 103.8° F., Hb. 80 per cent, R.B.C. 4,730,000, W.B.C. 19,800, 34 per cent P.M.H., 66 per cent lymphocytes, urine negative. A radiogram of the chest showed clear lung fields. There was some redness and swelling of the left lower lid and over the left cheek. The baby was placed on sulfadiazine therapy. For three days the temperature ranged from 101°-102.5°. The redness and edema of the lid increased and the left eye started to proptose. The bulbar conjunctiva became markedly chemotic. It was then first noted that the left side of the palate and the alveolar process were red and swollen, and a draining fistula was present on the hard palate and the posterior portion of the alveolus. The response to sulfadiazine was considered unsatisfactory. Five thousand units of penicillin every 4 hours was prescribed. The proptosis of the globe and lid swelling became progressively more marked. On the fifth hospital day, an incision and drainage of the floor of the orbit evacuated a large subperiorbital abscess. Culture of the pus was reported staphylococcus aureus.

The baby improved rapidly, became afebrile, and was discharged on October 10. He weighed 8 pounds 8 ounces, a gain of 10 ounces in spite of the severe pyogenic infection. The fistulas healed with no evidence of sequestration.

COMMENT

The cause of the suppuration of the maxilla which pointed both in the orbit and inside the mouth was likely the trauma of the pacifier used almost since birth. The presence of the fistula in the molar region, however, suggests the alternate possibility of a staphylococcus infection of the sockets of the unerupted first deciduous molar tooth. The prevention of sequestration of the maxilla and the loss of deciduous teeth and permanent tooth buds is attributed to the penicillin therapy. Prompt, adequate, surgical drainage is as important as chemotherapy in securing a successful result. The diagnosis is readily made from cases of orbital cellulitis and sinusitis by careful examination of the mouth. X-ray of the maxilla is of little help, except in the differential diagnosis of acute ethmoid and acute maxillary sinusitis. The latter diagnosis is not easy to make in infancy. The sinus is very small and difficult to evaluate on clinical and x-ray examination. Except for the buccal signs, an acute empyema of the antrum with associated orbital cellulitis and severe osteo periostitis simulates osteomyelitis of the superior maxilla. However, empyema of the antrum is rare in infancy. It usually accompanies acute contagious diseases and inflammation in other portions of the respiratory tract. Like a purulent inflammation of the ethmoid sinuses in infancy, it is usually a benign process and responds to conservative treatment. The appearance of edema of the lower lid in infancy is an early indication of infection in or around the maxillary bone. This is due to the profusion of anastomotic vessels in early life. An ostitis or thrombo-phlebitis arising from inflammation in the maxilla or in the paranasal sinuses can be detected at an early stage by this sign. Acute dacryocystitis should also be considered in the differential diagnosis. The complication of broncho pneumonia, septicemia, and brain abscess is avoided by early diagnosis and treatment. If a discharging sinus persists, sequestectomy weeks later may be necessary.

REFERENCE

1. Magnus, J. A.: *Brit. J. Ophth.* **28**:135-8, March, 1944.

THE CLINICAL SIGNIFICANCE OF HEMANGIOMATA OF THE LEG*

B. W. HAYNES, JR., M.D.,
Richmond, Virginia.

The term hemangioma might be defined simply as a tumor made up of a mass of blood vessels. Excluding the hemangiomata of the skin, i.e., birthmarks, port-wine stains, etc., which are mainly disfiguring in their effects, this communication intends to deal briefly with the less common types, but, importantly, the more serious types which are occasionally seen.

There are four principal reasons why hemangiomata of the leg are important clinically. The foremost difficulty is caused by the circulatory disturbances accompanying a free connection with the general circulation, either arterial or venous; second, the osteohypertrophy and shortening of the affected limb which frequently are attendant; third, the destruction of the organ or tissue in which the tumor happens to lie; and, fourth, the pain, swelling, and disfigurement accompanying their presence.

Should the angioma connect freely with the arterial tree, a circoid aneurysm is the most frequent result. This lesion, also termed congenital arteriovenous fistula, is characterized by a large pulsating mass of dilated veins, over which a thrill is frequently felt, and a systolic and diastolic bruit heard. The common location in the leg is between the femoral artery and vein. It is of importance because of the "short-circuiting" caused by such a lesion, and the subsequent increased venous return, right heart strain, and cardiac hypertrophy.[1] In addition, venous blood from the affected leg will show increased oxygenation over that of the opposite extremity; there will be an increased circulating blood volume,[1] and the patient may show lengthening of the involved extremity due to the enriched and increased blood supply.

Should the angioma connect freely with the venous side, i.e., through absent or defective valves, there will arise dilatation due to pressure in the vascular mass, more or less varicosities as we ordinarily use the term, and local and general circulatory symptoms. An angioma of this type might be spoken of as a "pool", or "lake", which, upon assuming the erect position, may capture a portion of the circulating blood volume sufficient to cause syncope. Lee and Freeman[2] report blood pressure falls from 120/70 to 80/60 upon going from the horizontal to the upright, and pooling within the tumor to the extent of over 500 c.c. This lesion is nearly always congenital, but may not cause marked circulatory disturbance until an attack of thrombophlebitis intervenes, causing destruction of the vein valves.

Osteohypertrophy and/or shortening of the leg[3] are not infrequently associated with extensive angiomata. The exact causative factors of these findings are not clearly understood. Shortening of the leg is believed, however, to be caused by inadequate tissue oxygenation.

Although the majority of these tumors occur in the soft tissues, they are also found in bone. They are relatively benign, however, the principal difficulty arising from the effects of local attrition by pressure. Ackermann and Hart[4] report a case followed over a 10-year period with fair results from roentgen therapy. Pathological fractures are not uncommon.

By far the greatest number of complaints arising from this condition are pain and swelling on dependency and exercise. Swelling can become so severe as to limit or prohibit walking, and the pain on exertion is sometimes very extreme, and may resemble the intermittent claudication seen in other peripheral vascular disorders. A prominent diagnostic sign of this lesion is x-ray evidence of phleboliths within the vascular spaces.[5] Ulcers often develop, the peripheral pulses are normal, and the skin temperature is higher on the affected side.

A brief case report is included to illustrate some of the points mentioned.

CASE REPORT

Miss W.W., a white female, age 19, was admitted to the Medical College Hospital on April 16, 1945, with chief complaints of varicose veins, pain and swelling of her left leg. She stated that this condition had been present since birth, and that the pain and swelling had become more marked in the last 2½ months. There had been no fainting upon arising, but moderate exercise was accompanied by calf and thigh pain. There was no history of thrombophlebitis.

*From the Department of Surgery, Medical College of Virginia.

Physical Examination.—Examination revealed a well-developed female of stated age. Her left thigh and buttock was the site of an extensive bluish mass, apparently subcutaneous, extending from the upper lateral buttock to below the knee. There was one especially prominent vascular area on the lateral aspect of the buttock, as shown in Figure 1. This

Fig. 1.—Tumor can be seen extending from the upper lateral buttock to below the knee. Note prominent varicose area.

vascular mass became slowly suffused upon standing, and emptied slowly upon assuming the horizontal position. There was no evidence of syncope. Blood pressures taken in the arm and leg in the vertical and horizontal positions showed no significant change. No abnormal sounds were heard or thrills felt over the involved area.

Routine blood, urine and Wassermann analyses were within normal limits. The venous oxygen saturation was 65 per cent in the affected leg, and 70 per cent in the unaffected; the venous pressures were normal bilaterally. There were no cardiac abnormalities, no bony changes in the involved leg, and no evidence of shortening or lengthening. On April 30, a saphenous ligation together with excision of the prominent varicose area was accomplished. As noted by Lee and Freeman,[2] much difficulty was encountered in wound healing. Prolonged oozing occurred, and hospitalization was appreciably lengthened. The patient had one episode of septic temperature apparently due to thrombophlebitis within the tumor mass, which subsided under penicillin therapy.

Pathological diagnosis was venous hemangioma of the skin. She was discharged on May 29 slightly improved, to return in two months for further treatment.

This case serves to illustrate some of the symptoms of hemangiomata of the leg, and highlights the difficulties in adequate therapy. Many types of treatment have been resorted to for this lesion with varying degrees of success. The treatment of choice for circoid aneurysms is surgical excision of the fistulous area, plus excision of the vascular mass. This will entail ligation of a major artery, and gangrene of the extremity would be the result were it not for the fact that an arterio-venous fistula enormously increases the collateral circulation. Even so, gangrene is a major concern. It is frequently quite difficult to ligate all the vessels communicating with the mass, and recurrences are frequent.

As to the hemangiomata which connect freely with the venous circulation, therapy is variable, depending upon the individual case. Generally speaking, the method of choice is ligation of the veins connecting the angioma with the general circulation, and allowing the mass to become obliterated by thrombosis. Sclerosing agents have been used with variable results. X-ray radiation has been tried with little success. Some cases will respond only to complete excision of the vascular tumor. Weaver and Rumold[6] report a case requiring amputation of the buttock to effect a cure.

The problem of osteohypertrophy and shortening is largely one of prevention. In this regard, it becomes important that such angiomatous lesions be treated early in life, and followed over a prolonged period.

To recapitulate briefly, hemangiomata of the leg are important clinically chiefly from the standpoint of the pathological physiology they engender within the cardio-vascular system. Osteohypertrophy and growth disturbances of the extremity may accom-

pany this lesion. Ligation and excision of the vessels connecting the mass to the general circulation, allowing the tumor to obliterate by thrombosis, is the treatment of choice. Selected cases may require complete excision of the tumor mass.

BIBLIOGRAPHY

1. Holman, E.: Arteriovenous Aneurysms, The Macmillan Co., New York, 1937.
2. Lee, W. E., and Freeman, N. E.: *Annals of Surgery* **112**:960, 1940.
3. Reid, Mont R.: *Am. Jour. of Surgery* **14**:17, 1931.
4. Ackerman, A. J., and Hart, M. S.: *Am. Jour. of Roent.* **48**:47, 1942.
5. Fulton, M. N., and Sosman, M.C.: *J.A.M.A.* **119**:319, May 23, 1942.
6. Weaver, J. B., and Rumold, M. J.: *Am. Jour. of Surgery* **60**:149, 1943.

Veterans Administration.

The Veterans Administration is seeking medical rehabilitation workers with experience in handling convalescent patients to carry out the intensive program planned in VA hospitals, according to Dr. A. R. Dawson, chief of medical rehabilitation in the Richmond Branch. Occupational and physical therapy as developed and refined in Army and Navy hospitals proved valuable in speeding recovery of war-time casualties, and it is from among the skilled therapists trained in the military convalescent services that VA expects to draw most of its staff to carry on the reconditioning program. Salaries for positions open in this field range from $1,902 to $3,640. VA is constructing medical rehabilitation facilities at its existing hospitals in Virginia, Maryland, West Virginia, North Carolina, and the District of Columbia. Applications from persons having the required educational and practical qualifications are being received at the branch office in Richmond.

"Getting well by doing something" often starts with simple breathing and movement exercises even before the patient is able to sit up in bed. Guided by lay instructors under supervision of medical specialists, the wounded veteran progresses to advanced exercises designed to rebuild specific muscles. At the same time he is being instructed in handicrafts, academic studies and occupational skills, and is engaging in hobbies. While the advance portions of the reconditioning program take on the aspects of vocational rehabilitation, the plan is aimed only at helping the veteran to recover more quickly and more completely.

Tridione for Psychomotor Attacks.

Tridione, a new drug whose effect on epilepsy is still being investigated, has brought spectacular results in some cases of psychomotor seizures, a condition in which mental disturbance is the principal feature of the attacks.

Writing in the March 2 issue of *The Journal of the American Medical Association,* Russell N. DeJong, M.D., from the Department of Neurology, University of Michigan Medical School and University Hospital, Ann Arbor, Mich., says that thus far tridione has not proved to be sufficiently effective when used alone, partly owing to the fact that most of the patients in his study were also subject to other types of epilepsy. These had been treated by anticonvulsant drugs such as phenobarbital and the bromides but in no instance were psychomotor attacks controlled by these drugs. The drugs were continued with the tridione, Dr. DeJong says.

Psychomotor seizures are characterized by loss of memory during which the patient may act like one intoxicated. The attacks may last only a few minutes or they may go on for hours or days. While in this state the patient is morose and irritable and may become ugly or violent if forcibly restrained. Patients are often incapacitated by the attacks, and, as the result of the nature of the seizures, may require custodial or institutional care.

In conclusion the author says that tridione used in conjunction with other anticonvulsants "has almost completely controlled the psychomotor seizures in a large percentage of the cases and has resulted in a decided psychologic improvement."

XUM

A STUDY TO DETERMINE THE ANTIBACTERIAL EFFICIENCY OF COMBINED TYROTHRICIN AND SULFADIAZINE

RICHARD KELSO, M.D.
and
BASIL THOMPSON, M.D.,
Arlington, Virginia.

The purpose of this study was to determine the in vitro efficiency of a mixture of sodium sulfadiazine and tyrothricin as a bactericidal agent against those organisms commonly found in the upper respiratory tract, ear, and infected sinuses.

Tyrothricin, the alcohol-soluble, water-insoluble extract of peptone cultures of Bacillus brevis, is a mixture of at least two substances which have been separated as the crystalline compounds gramicidin and tyrocidine. Tyrothricin in a 1:2000 dilution, and sodium sulfadiazine in a 2 per cent concentration were present in the mixture* used in this study.

Gram-positive bacteria against which tyrothricin is effective in vitro include streptococci, staphylococci, pneumococci and diphtheria bacilli. These organisms are, incidentally, the ones commonly encountered as causes of infections involving skin, soft tissues, nasopharynx and accessible body cavities, such as the paranasal sinuses. The high in vitro antibacterial activity of tyrothricin and its components have been the subject of reports by Dubos,[1,2] Hotchkiss and Dubos,[3] Goodman,[4] Herrell and Heilman,[5,6,7,8,9] Tishler, Stokes, Trenner and Conn,[10] Christensen, Edwards and Piersma,[11] and others.

Tyrothricin is non-toxic but without therapeutic effect when given by mouth. It is both dangerous and ineffective when given by intravenous or intramuscular injection. On local application, its toxicity for tissues is quite low, and it has been widely employed topically and by instillation and irrigation in accessible body cavities without untoward effects.

The literature concerning the antibacterial activity of sulfadiazine is voluminous. It may suffice to say that in general the following organisms are susceptible to its action: Beta hemolytic streptococci, pneumococci, meningococci, gonococci, staphylococci, and Friedlander's bacillus.

*The mixture of sodium sulfadiazine and tyrothricin was supplied for testing purposes through courtesy of the manufacturers, International Chemicals, Washington, D. C.

The above mixture has been commonly used in the treatment of chronic upper respiratory infections and certain types of vaginitis, cervicitis, and otitis externa.

The purpose of this investigation was to determine the in vitro antibacterial properties of a combination of tyrothricin and sodium sulfadiazine in order to determine whether the two chemicals combined would be more efficacious than either alone when used against bacteria commonly found in the upper respiratory tract. The organisms used for this study were either isolated in pure culture from human throats, sputa, or nasal secretions, or obtained from the culture collections at the National Institute of Health, Bethesda, Maryland. It will be noted that several organisms are included in this list that are not ordinarily present in the upper respiratory tract. These were observed for control purposes.

The technic used for this study was as follows: The organism, isolated in pure culture, was grown on a beef infusion agar stab and kept as a stock culture. A loopful of the stock culture was transferred to a tube of beef infusion broth and incubated at 37° C for 12 hours. This tube was diluted 1:10 with sterile broth and 0.1 cc. of tyrothricin-sodium sulfadiazine suspension was added. A similar tube was prepared and 0.1 cc. of 2 per cent sodium sulfadiazine was added, and a tube containing 0.1 cc. of 1:2000 tyrothricin was also prepared. A control tube of the 1:10 suspension was used. All tubes were incubated at 37° C, for 6 hours, and then transferred to a Klett-Summerson Photoelectric Cell Colorimeter, using the number 54 green filter and adjusting the indicator to zero position with a control tube of sterile broth.

Below is a table showing the results of these observations.

A series of tests were carried out during a three months period, and the combined solution remained quite stable as far as its antibacterial action was concerned. Newly-prepared solutions gave results

ORGANISM	CONTROL	SODIUM SULFADIAZINE		TYROTHRICIN		COMBINATION	
	Colorimeter reading	Colorimeter reading	Inhibitory effect	Colorimeter reading	Inhibitory effect	Colorimeter reading	Inhibitory effect
Staph. aureus	56	43	+	41	+	35	++
Staph. albus	62	40	+	38	+	36	++
Strept. hemolyticus	44	29	++	27	++	26	+++
Strept. fecalis	30	30	0	21	++	21	++
Friedlander's A	48	32	+	45	0	36	+
Friedlander's B	87	55	+	88	0	61	+
N. intracellularus	29	24	+	27	0	25	+
N. catarrhalis	42	29	+	24	++	30	+
C. diphtheriae	28	27	0	19	+	22	+
C. pneumoniae	37	30	+	22	++	24	+
S. paratyphi	66	63	0	64	0	63	0
S. interitides	86	80	0	75	+	84	+
E. coli	69	64	0	73	0	66	0

which were comparable to those prepared three months previously.

CONCLUSIONS

It would appear from the above observations that, at least in vitro, a combination of tyrothricin and sodium sulfadiazine is more efficacious as an antibacterial agent than either alone when used against organisms frequently found in the upper respiratory tract, and tends to confirm clinical findings.

Furthermore, the solution suspension appears relatively stable.

REFERENCES

1. Dubos, R. J.: *Proc. Soc. Exper. Biol. and Med.* **40**: 311, 1939.
2. Dubos, R. J.: *Ann. Rev. Biochem.* **11**:659, 1942.
3. Hotchkiss, R. D., and Dubos, R. J.: *J. Biol. Chem.* **141**:155, 1941.
4. Goodman, L. S.: *Bull. New York Acad. Med.* **18**:112, 1942.
5. Herrell, W. E., and Heilman, D.: *J. Clin. Investigation* **20**:433, 1941.
6. *Idem: J.A.M.A.* **118**:1401, 1942.
7. *Idem: Proc. Soc. Exper. Biol. and Med.* **46**:182, 1941.
8. *Idem: J. Clin. Investigation* **20**:583, 1941.
9. *Idem: J. Bact.* **43**:12, 1942.
10. Tishler, M., Stokes, J. L., Trenner, N. R., and Conn, J. B.: *J. Biol. Chem.* **141**:197, October, 1941.
11. Christensen, H. N., Edwards, R. R., and Piersma, H. D.: *J. Biol. Chem.* **141**:187, October, 1941.

3260 Wilson Boulevard.

Two New Quarterly Reviews.

The Washington Institute of Medicine announces two new publications, the *Quarterly Review of Psychiatry and Neurology* and the *Quarterly Review of Urology,* the first issues of which will be published shortly.

Dr. Winfred Overholser, Professor of Psychiatry of George Washington University School of Medicine and Superintendent of St. Elizabeths Hospital, Washington, D. C., is Editor-in-Chief of the *Quarterly Review of Psychiatry and Neurology.*

Dr. Hugh J. Jewett, Johns Hopkins University, Baltimore, is Editor-in-Chief of the *Quarterly Review of Urology.* Among the members of the Editorial Board is Dr. Austin I. Dodson of Richmond.

XUM

THE FORUM

The Virginia Program of Vocational Rehabilitation.

The Virginia State Board of Education provides a service of occupational adjustment to persons who have employment handicaps caused by disability or impairment. It is known as the Service of Vocational Rehabilitation, and was authorized by the State Legislature in 1920. The law was amended in 1922 to enable the State to use federal funds made available for this purpose on a matching basis.

The Rehabilitation Service is interested in the problems of the disabled of work age who can become productive citizens if given the opportunity. The purpose of the Service is to provide them with this opportunity. The Service functions under the direction of trained field personnel working out of eight district offices located at: Norton, Marion, Roanoke, Lynchburg, Culpeper, Halifax, Richmond and Norfolk. At present there are sixteen field workers, known as District Supervisors of Rehabilitation.

The three major responsibilities of this staff are:

(1) To determine the cause of the unemployment or unsatisfactory work adjustment of the disabled persons in their districts. This requires a careful evaluation of the disabled persons' disabilities and limitations—physical, mental, and emotional. In this activity medical advice is essential.

(2) To help disabled persons: (a) decide upon occupations suitable to their remaining abilities; (b) plan and carry out measures necessary to overcome their handicaps; (c) become engaged successfully in such occupations.

(3) To procure for disabled persons such services as they may require in making vocational adjustments, including financial assistance, when necessary.

The disabled person may require a number of services in preparing himself for his work objective. Rehabilitation may provide these services, if not available to him through other sources. Among such services, other than guidance and planning, that may be provided, are: physical restoration or the correction or reduction of disabilities through medical, surgical, or therapeutic means or the provision of prosthetic appliances; trade or vocational training in an established school or shop; living maintenance in a training program; supervision of preparatory services; placement and follow-up in employment to assure adjustment.

The physical restoration service is the phase of this program likely to be of most interest to physicians. In 1943 the State Board of Education, for the first time, was permitted to use state-federal matched funds to pay for hospitalization, surgery, and treatment under certain conditions. For its guidance in the proper development of this phase of the service, the State Board of Education has sought the advice and cooperation of the medical profession. The Medical Society of Virginia has appointed a Committee on Rehabilitation. This Committee has been named by the State Board of Education as its Medical Advisory Committee for the Division of Rehabilitation.

Laws and regulations under which the Rehabilitation Division operates require that certain conditions be met before rehabilitation funds can be used in paying for any physical restoration service for any of its cases. These conditions are as follows:

(1) The client—man or woman, white or colored—must be financially unable, from his own or any other available resources, to pay the whole cost of the physical restoration service indicated in his case.

(2) The client must be of work age and must have been classified by the Rehabilitation Division as potentially employable.

(3) The disability must have been determined by the Rehabilitation Division, with medical advice, to constitute an employment handicap.

(4) The disability must have been determined medically to be static and one which can be removed or materially reduced within a reasonable length of time and at a reasonable cost.

When the circumstances in the case meet these requirements, the Rehabilitation Division may authorize the expenditure of funds under the following conditions and for the following services:

(1) Hospitalization in a recognized hospital at an inclusive per diem cost rate established on the basis of that hospital's actual cost experience in the preceding fiscal year, but in no one case for a period of more than 90 days.

(2) General and special medical examinations,

surgery, medical treatment, or other therapy on a fee schedule having the approval of the Medical Advisory Committee, when these services are not included in the calculation of per diem costs by the hospital in which the client is a patient.

(3) Prosthetic appliances required to improve employability.

Rehabilitation clients who may require financial assistance in the procurement of necessary physical restoration services are medically indigent persons who can be made fit to engage in useful work. They are persons whose financial status must be shown to be such that they cannot provide an amount, over and above the minimum living requirements of themselves and their dependents, sufficient to purchase needed surgery, hospitalization, treatment or prosthetic appliances.

The funds of the Rehabilitation Service are limited. Authority to pay for the correction or reduction of physical defects in its indigent clients was acquired in 1943. Since that time the Service has paid actual, proven hospital cost and professional fees adjudged by the Medical Advisory Committee to be reasonable. It has assumed these costs only when they could be obtained from no other source. It may render this service only in cases which it has studied and which have been found to meet the requirements set forth above.

Persons in need of rehabilitation service are referred to the Division of Rehabilitation by interested individuals, doctors, hospitals and clinics, public health and welfare offices, schools and other civic agencies.

The Rehabilitation Committee of the Medical Society of Virginia is composed of: Dr. Roy M. Hoover, Roanoke, Chairman; Drs. Paul Camp, Leroy Smith, and I. C. Riggin, Richmond; Drs. F. B. Stafford and Hugh Page Newbill, Charlottesville; Drs. N. F. Rodman and George Duncan, Norfolk; and Dr. G. B. Setzler, Pennington Gap.

A Study of Child Health Services.

TO THE PHYSICIANS OF THE STATE OF VIRGINIA:

The necessity for physicians to be well informed concerning all phases of health and disease in their localities is imperative if they expect to continue to be the leaders in the Health field. Already many organized groups and individuals have been pressing the Congress for legislation in this field.

In order that the physicians may speak with authority on the status of the welfare of infants and children the American Academy of Pediatrics is making a study of Child Health Services to determine the extent and quality of these services. Each state is conducting its own study under the leadership of the state chairman who in Virginia is Dr. James B. Stone. The Virginia Pediatric Society and the president of the Medical Society of Virginia have endorsed this survey. As executive secretary, Mr. Howard O. Burnette has been appointed and the survey is about to begin.

The survey covers (1) Hospital Facilities, (2) Community Health Services, Official and Voluntary, (3) Distribution, Qualification and Activities of Professional Personnel, and (4) Pediatric Education.

One of the fundamental purposes of the present study is to stimulate local groups to discover for themselves the needs of their own communities and the facilities to meet those needs. Essentially, this means the collection of a large scale of adequate and reliable data.

To make it successful each physician must do his part with willingness and accuracy. Physicians in private practice will be asked to complete a short one-page questionnaire concerning their pediatric practice. These questions are entirely impersonal.

The challenge for Health planning for the future lies at the feet of the medical profession. Let us not fail to accept it and its responsibilities.

EMILY GARDNER, M.D., *President,*
Virginia Pediatric Society.

Bernard Shaw's Criticism of the Medical Profession.

Just why Mr. Bernard Shaw for many years has seen fit to criticize the medical profession I never could understand. Since he published his "Doctor's Dilemma" in 1906 he has published many plays; but that probably shows him at his worst. In his latest "column" sponsored by the International News Service he has seen fit to attack the memory of Sir Joseph Lister in terms that would appear to come from a rabid and disordered mind. These opinions of his appeared as late as last November (1945) and were circulated chiefly in England where Sir

XUM

Joseph lived and was the chief ornament of an honorable profession.

As long ago as 1871 Mr. Lister was called upon to treat an axillary abscess in her Majesty, Queen Victoria, and he used something quite new in London, a spray of carbolic acid to prevent contamination of the wound and, incidentally, of the surrounding atmosphere. Lister had previously treated a compound fracture of the leg in the Glasgow Infirmary in the same manner very successfully and that gave him confidence in using this method on the queen. As aseptic methods came to the fore under Lawson Tait and Spencer Wells, especially in abdominal operations, Lister gave up the use of the spray.

I remember very well using the large steam atomizers while an assistant to a Philadelphia surgeon when the carbolic spray was in vogue. This was at a time when marine sponges were used again and again in all operations, after repeated boiling, the large flat ones being used intra-abdominally.

Lister discovered that ligatures of sheep's gut (catgut) were absorbable and these soon supplanted silk ligatures whose ends were commonly allowed to hang out of the wound when closed and there were many anxious days before these were safely removed from some of the larger vessels. Of course they afforded a ready pathway for infection. The buried catgut or cotton thread suture has been a blessing to patient and surgeon alike.

Of course all this was before the days of rubber gloves, an indispensable part of aseptic surgical technique, attributed to Halsted of Baltimore.

It is rather strange that a newspaper item written by a layman who has a grudge against the medical profession should serve to recall some of their most precious contributions to the art and science of surgery that will be long remembered when the critic has passed into oblivion.

GUY HINSDALE, M.D.,
Charlottesville, Virginia.

Baruch Center of Physical Medicine, Medical College of Virginia.

A fundamental study of the physics and chemistry of muscle—the ultimate objective of which is to improve the treatment of veterans who suffered extensive peripheral nerve lesions in the war—is being carried out at the Baruch Center of Physical Medicine at the Medical College of Virginia. The center is supported by the Baruch Committee on Physical Medicine, founded a year ago by Bernard Baruch, New York philanthropist.

The behavior of muscle tissue and the relations between nerve and muscle remain among the most perplexing fields of physiology, although their importance is obvious from the fact that the human body in action might be considered as a nerve-muscle machine.

There were hundreds of war injuries to arms and legs, especially from land mines, which resulted in severed nerves leading to muscles, followed by progressive atrophy of the muscles themselves.

The basic experimental work at the Medical College of Virginia is under the direction of Dr. Ernst Fischer, widely recognized for his fundamental studies on the physiology and bio-chemistry of denervated muscle. Although possible improvement in treatment of the war wounded seems at present the most important practical application of these studies, any fundamental findings may have a wide application in other abnormalities of the nerve-muscle complex, as for example those found in poliomyelitis.

Dr. Fischer wishes to know what actually happens when muscle atrophies. This might lead to a rational treatment program rather than one based entirely on empirical findings. Preliminary experiments already have shown demonstrable and measurable changes taking place in some of the constituents of muscle tissue.

When nerve fiber is severed, the end cut off from the central nervous system soon dies. The segment still connected with the spinal column survives and starts to grow out again to fill in the gap. Normally this growth is very slow—approximately an inch a month. The nerve is trying to find its way back to the muscle to which it once was connected. But, unless it connects at once with the cut off segment, it is fumbling in the dark. Nerves, apparently, have no "homing instinct". In many war injuries there may be a gap of several inches between the segments. The growing nerve cannot find its way across this gap unless it is guided and the only practical way to do this is by nerve grafting. A segment of nerve fiber is grafted across the space, connecting the live, growing nerve with the dead nerve. The graft itself soon dies, but this makes no difference. The centrally connected segment will grow along the path of the dead graft, its growth

will be considerably accelerated, and it will find its way to its appropriate muscle. With best surgery, the nerve grows as much as two inches a month.

Now muscle detached from its nerve supply progressively atrophies, losing its capacity for contraction. If this atrophy progresses very far it becomes essentially irreversible. The sooner the nerve connection is restored, the better the chances for a useful muscle, but the slow rate of nerve growth makes prospects quite dim where there is a wide gap. Animal experiments have demonstrated, however, that both by massage and electrotherapy, the progressive atrophy of muscle can be delayed significantly, although not altogether prevented. The indicated lines of research are two-fold: first, to find methods of accelerating nerve growth, and second, of delaying muscle atrophy as long as possible.

The technique of nerve grafting has been greatly improved by surgeons throughout the world during the war. The second half of the problem is under attack at the basic research laboratory of the Baruch Center of Physical Medicine at the Medical College of Virginia.

Aside from war wounds, the field in which nerve degeneration and muscle atrophy is best known is poliomyelitis and it may be expected that important light will be thrown on the nature and treatment of the after-effects of this malady. It is somewhat more complex, however, than the wound problem where, in the beginning, only the nerve is affected. There is no certainty that in polio the muscle itself may not be affected in some obscure way by the disease processes, even before the atrophy due to losing nerve connections has started. This possible effect on muscle is one of the problems to be faced in the future.

Third Refresher Course.

The third of four Refresher Courses given conjointly and alternately by the Medical College of Virginia and the Department of Medicine of the University of Virginia every three months for one year will be held in Charlottesville from June 3rd to the 15th.

These courses are designed primarily as intensive courses in general medicine and they consist of 36 lectures, 10 ward rounds (choice of two) and 10 ward rounds (choice of four) during the day by local staff members. For the June clinic, the evening speakers will be Dr. Harold G. Wolff of New York Hospital, two evenings on "Headaches"; Dr. I. A. Bigger of MCV will speak on "Surgery of the Heart"; Dr. Harry Beecher, Professor of Anesthesiology at Harvard, will talk on "Preparation of Patients for Surgery" and Anesthesia". During the second week, Dr. E. C. Hamblen of Duke University has been invited for two of the evening talks on "Female Endocrinology"; Dr. Harvey Haag of MCV will speak on "Newer Drugs"; and Dr. W. H. Sebrell, Chief of the Division of Physiology of the U. S. Public Health Service, will speak on "Diagnosis and Treatment of Deficiency Diseases" and "Current Research on Nutrition".

Whereas these courses are designed primarily for returning veterans and the veterans will be given priority in acceptance, nevertheless they are open to all physicians up to a quota of 50 registrants. Anyone interested in receiving the final program, application blank, or any other information about the course should write to Box 1725, University Station, Charlottesville. The tuition for the two-week course is $40.

Normal Human Dried Blood Plasma—Army-Navy Surplus.

1. SOURCE AND DISTRIBUTION OF THE SURPLUS PLASMA

The American Red Cross is furnishing dried blood plasma without charge for use in civilian medical practice. This material was prepared from blood collected by the American Red Cross for the Army and the Navy and has now been declared surplus to their needs. Supplies of this surplus plasma are provided to *State Departments of Health* by the American Red Cross for distribution to all physicians licensed to practice medicine and surgery and to all acceptable hospitals for use without charge for the product.

2. DESCRIPTION OF THE PLASMA

This plasma has been prepared by commercial firms licensed by the National Institute of Health in the standard Army-Navy packages from blood collected by the American Red Cross. There are two package sizes: one contains 250 cc. original plasma (17 gm. plasma protein), the other 500 cc. (34 gm. plasma protein).

XUM

3. THE STANDARD ARMY-NAVY PACKAGE

This consists of a sealed outer carton containing two metal cans. One holds the bottle of dried plasma, the other the distilled water for reconstitution of the plasma. The necessary tubing, needles, and other equipment required for reconstitution and administration of the plasma are also contained in the two metal cans. Instructions for reconstitution and administration are lithographed on the outside of the metal cans. Most of the packages also contain a report form to be filled out and mailed to the Army or Navy Medical Center. This report form may be used if desired for local or state studies but *is not to be mailed to the Army or Navy.*

4. IMPORTANT CONSIDERATIONS IN THE USE OF DRIED PLASMA

a) *Dried plasma must be used within three hours after being put into solution.* If it were contaminated and allowed to stand several hours, sufficient bacterial growth could occur to produce fatal reactions.

b) *Dried plasma must not be restored to the liquid state with diluent which is warmer than 100°F.* The reconstitution of dried plasma at a temperature appreciably higher than normal body temperature may produce changes in the plasma proteins which could give rise to serious or fatal reactions.

c) *Plasma must not be heated during administration.* Such a procedure may also cause reactions through altering the plasma proteins. The control of temperature is too difficult to make it safe to attempt to bring the plasma to body temperature for administration, and, furthermore, clinical research has proven that it is unnecessary to warm any solution given intravenously.

d) *Dried plasma should be stored in a dry place where the temperature does not go below 35°F. or above 120°F.* The bottle of diluent may freeze and break below 32°F. and the dried plasma proteins may be altered above 120°F.

5. INDICATIONS FOR TRANSFUSION

a) The principle functions of whole blood and plasma transfusions may be classified as shown in the accompanying table.

b) Plasma has also been shown to be of distinct value in treatment of the shock which often exists in:

1. Crises of Addison's Disease
2. Diabetic Coma after Dehydration
3. Cholera and Infant Diarrhaea

and as supporting treatment in:

4. Intractable Ulcerative Colitis.

5. CONTRAINDICATIONS FOR TRANSFUSION

There are few contraindications for blood or plasma transfusion, but these should be observed with extreme care. The presence of edema of the lungs due to congestive heart failure or severe pulmonary infections, particularly in infants, is almost always a contraindication. It has been shown that failure of the left side of the heart may be produced by the intravenous injection of as little as 200 cc. of saline in an individual with borderline compensation. In extreme cases edema of the lungs may be produced by the rapid injection of as little as 50 cc. of blood.

7. ADVERSE REACTIONS FROM THE ADMINISTRATION OF HUMAN PLASMA

Adverse reactions from the administration of the surplus dried plasma may be due to any one or a combination of the following:

a) Heating plasma prior to or during administration.

b) Bacterial contamination.

c) Virus contamination.

The processing of plasma to the dried state does not as a rule inactivate a virus. Serum jaundice has been reported to be transmitted by blood and plasma transfusions even though the donor had only a subclinical infection. It is possible, therefore, that some lots of dried plasma may contain an active virus. Serum jaundice may occur from 1 to 4 months after the administration of contaminated plasma. Since it may be a severe and debilitating illness, physicians should only use plasma where definitely indicated.

d) Failure to filter the plasma during administration.

Plasma should *always* be filtered. A filter is included in the administration set provided in the standard Army-Navy package of plasma.

e) Improperly cleaned intravenous equipment.

This should not be a factor if the set contained in the plasma package is employed for administration.

f) Urticarial or anaphylactoid reactions.

The likelihood of these has been minimized

through the use of fasting donors and the rejection of those with an active allergy.

g) Circulatory embarrassment.

Reaction Rates: Army experience with this plasma showed that from 1 to 2 per cent of the plasma transfusions were followed by urticarial reactions, and that approximately 2.6 per cent were followed by chill and fever reactions.

8. TREATMENT OF SHOCK WITH CITRATED PLASMA

The following paragraphs present a brief review of the use and dosage of plasma in shock accompanying hemorrhage, trauma, and burns. The life-saving value of plasma in the treatment of shock is its most striking use in both civilian and military medicine.

Any evaluation of the fluid replacement therapy in shock must consider the extent and degree of the lesion, the age and physical status of the patient, as well as other therapeutic measures undertaken. It is well known that minimal trauma may produce serious systemic reactions in the physically debilitated. In addition, the state of hydration of the patient must be estimated as accurately as possible. This is not always easy under emergency conditions, since laboratory studies may of necessity be deferred.

Shock due to hemorrhage or trauma: In the treatment of shock all that is possible must be done to prevent the initiating factors from acting a sufficiently long time to produce clinical manifestations. The best treatment is, in other words, prevention. Patients exposed to obvious and sufficient precipitating factors must be treated as potential cases of shock without waiting for the appearance of clinical symptoms. Thus, a patient who has sustained extensive injury with crushing of tissues, with or without evident blood loss, should not be submitted to an extensive operative procedure involving general anesthesia without a dose of 25 to 500 cc. of undiluted or original plasma.

In shock due to massive hemorrhage, the clinician must always bear in mind that the need for whole blood transfusions is urgent. Plasma transfusions will almost always tide the patient over if adequate amounts are given promptly enough, but whole blood is needed within a matter of hours if the red cell level has been reduced near to the minimum compatible with adequate oxygenation of the body tissues. In any event the red cell level should be brought to normal as soon as possible to help create in the patient the optimal state for recovery.

Patients in shock, with such manifestations as cold, moist skin, grayish-blue color, feeble and rapid pulse, blood pressure unchanged or slightly lowered, must be treated immediately and adequately. The management of early shock is as a rule a simple and successful procedure, whereas late shock is often very difficult to combat. The line of demarcation between early shock and late shock divides the patients who can be successfully treated with relatively small doses (250 to 750 cc. of undiluted plasma) and those in whom larger doses (750 to 1,500 cc. or more of undiluted plasma) must be employed repeatedly with only a fair chance of success.

The severe forms of shock are usually present in patients who, regardless of the severity or nature of the initiating factors, have been allowed to go for a period of time without adequate treatment. As a typical finding, they may show considerable drop in the total amount of plasma proteins. These patients usually have also a conspicuous drop in the blood pressure and particularly in the pulse pressure, rapid thready pulse, severe reduction of the skin temperature, collapsed veins, slow flow of blood from wounds, thirst and low urinary output.* In these cases, maximum doses of plasma must be given (1,500 to 3,000 cc. of undiluted plasma and even larger doses). The first 250 to 500 cc. should be given at once and rapidly. Difficulty may be experienced in finding a suitable vein under these extreme conditions. To await a fall in the blood pressure before making a diagnosis of shock is reprehensible, but in the treatment of shock the blood pressure is a very good index by which to judge the efficiency and adequacy of treatment in general and the dosage of plasma in particular.

Shock due to burns: Patients with burns require very large amounts of plasma and must be watched carefully for the first 48 hours if shock is to be avoided. A good general rule is that 1,000 cc. of whole (undiluted) plasma for every 10 per cent of body surface burned is required during the first 24 hours. Almost as much may be needed on the

*Hemoconcentration may be present in severely dehydrated patients and in patients with severe burns or crush and abdominal injuries. Hemodilution is usually present in hemorrhage and skeletal trauma (which implies hemorrhage).

XUM

second day. The use of large quantities of plasma (2,000 cc. or more within 24 hours) may at times result in the development of pulmonary edema, particularly after the inhalation of fumes or in the presence of chest injury. It is often advisable to supplement plasma therapy with whole blood transfusions even in the first 48 hours to avoid subsequent anemia. After the first two days of treatment, whole blood is always preferable to plasma.

CAUTION IN THE USE OF LARGE DOSES OF PLASMA

In the treatment of patients showing evidence of impairment or renal function the presence of a mercurial preservative in plasma should be borne in mind, since it may conceivably add to renal damage if more than 2,000 to 3,000 cc. of plasma are administered in the course of 24 hours. Ordinarily the rate of administration of plasma should not exceed 150 to 300 drops (10 to 20 cc.) per minute. In advanced shock, where time is at a premium, it should be given as rapidly as possible—even to the extent of using two intravenous routes at the same time—until improvement is evident.

This material was prepared by the Committee on Blood and Blood Derivatives of the Advisory Board on Health Services of the American Red Cross. The Committee consists of: Doctors Charles A. Janeway, Chairman, Alfred Blalock, Edwin J. Cohn, Elmer L. DeGowin, Charles A. Doan, Robert F. Loeb, and Dr. John B. Alsever, Director of Blood Donor Service, American Red Cross.

The Virginia State Department of Health has completed the distribution of the initial supply of the dried blood plasma to all hospitals and physicians in this State. Requests for replacement of plasma may be made directly to the Department at Richmond, Virginia. It is estimated that the reserve supply now on hand will be sufficient to meet the needs during the next two years.

INDICATIONS FOR TRANSFUSION*

Indication	Whole blood		Plasma or serum	
	Choice	State (fresh or preserved)	Choice	State (fresh liquid, stored liquid, frozen, dried)
Shock due to hemorrhage (traumatic shock)	First[1]	No preference	Second	No preference
Shock with hemoconcentration—Initial treatment (burns, crush syndrome, and abdominal injuries)	Second	No preference	First	No preference
Hypoproteinemia	Second	No preference	First	No preference
Acute and chronic anemias	Imperative	No preference	Not indicated	
CO poisoning and methemoglobinemia	Imperative	No preference	Not indicated	
Immune therapy	Second	No preference	First	Fresh liquid, frozen, or dried
Deficiency of complement	Either	Fresh	Either	Fresh liquid, frozen, or dried
Deficiency of prothrombin	Either	Fresh	Either	Fresh liquid, frozen, or dried
Leukopenia and thrombocytopenia	Imperative	Fresh	Not indicated	
Hemophilia	First	Fresh	Second	Fresh liquid, frozen, or dried

1. The recommendation of first and second choice is made on the assumption that both blood and plasma are immediately available.

*Table adapted from OCD Technical Manual, "The Operation of a Hospital Transfusion Service".

THE RH FACTOR

COMMITTEE ON MATERNAL HEALTH
MEDICAL SOCIETY OF VIRGINIA

The Rh factor gets its name from *Rh*esus, rhesus monkey. The red cells of the monkey carry a factor that 85 per cent of humans possess. Those whose red cells carry this factor are called Rh positive; those who do not, Rh negative. While the red cells carry the Rh factor, the plasma carries another set of factors capable of agglutinating the red cells of the donor who is Rh positive.

There are four major blood groups: AB, A, B, and O which correspond to the Moss classification: Groups I, II, III and IV. Factors contained in these groups are responsible for the ordinary transfusion reaction of incompatible blood. Other reactions may be due to other factors such as the Rh factor. Of the random white population 85 per cent are Rh positive; 15 per cent Rh negative.

Under two conditions plasma will develop a factor or factors capable of agglutinating the red cells of an Rh positive donor:

1. Following repeated transfusions of blood from Rh positive donors into Rh negative recipients. In spite of careful typing and cross matching for the four main blood groups, serious reactions may occur if Rh compatibility is not checked, particularly when a transfusion is given after the lapse of several weeks following the last of a series of transfusions. If the patient is Rh negative and receives Rh positive blood, the factor capable of agglutinating the red cells is formed in the plasma. If the patient is again given Rh positive blood, that factor already developed in the recipients plasma will agglutinate the donors red cells.

2. In some pregnancies, when the mother is Rh negative and the father is Rh positive, the fetus will inherit the Rh factor in proportion determined by whether the father is homozygous or heterozygous. During pregnancy when the mother is Rh negative and the fetus Rh positive, occasionally the Rh factor enters the maternal circulation by a mechanism as yet not fully understood. Repeated circulatory accidents in the placental barrier is a reasonable explanation. In response to this factor, the maternal tissues elaborate a factor carried in the plasma which has the capacity both to agglutinate and hemolyze. This factor is fluid and not cellular and is, therefore, resorbed through the placental barrier to enter the fetal circulation and exerts its specific destructive action against the fetal red blood cells.

In the ensuing struggle the fetus may die in utero, it may be born without any visible changes and die later, or it may be born with the usual manifestations of erythroblastosis, i.e., icterus or hydrops. In the babies born alive, there is frequently found a large percentage of immature red cells in the blood smears taken from cord blood or from smears made soon after birth. After a varying period of time, from several hours to a few days, a severe anemia may become evident. Many of these infants, alive at birth, may be saved by prompt and repeated small transfusions. Of necessity, these transfusions should be from normal Rh negative donors. The frequency of the transfusions will vary with the severity of the blood destruction as evidenced by the anemia. They should be continued until there is no further evidence of blood destruction, which may be from two to six weeks.

A paper giving a more complete discussion of the Rh factor will be forwarded on request by writing: Committee on Maternal Health, Medical Society of Virginia, 1200 East Clay Street, Richmond 19, Virginia.

XUM

PUBLIC HEALTH

I. C. RIGGIN, M.D.,
State Health Commissioner of Virginia

The report of the Bureau of Communicable Diseases of the State Department of Health for March, 1946, as compared with the same month in 1945, and for the period of January through March, 1946, compared with the same period in 1945, follows:

	Mar. 1946	Mar. 1945	Jan.-Mar. 1946	Jan.-Mar. 1945
Typhoid and Paratyphoid Fever	8	3	19	12
Diarrhea and Dysentery	187	419	408	812
Measles	2,900	380	4,393	630
Scarlet Fever	579	734	1,107	1,647
Diphtheria	38	18	141	80
Poliomyelitis	6	3	7	11
Meningitis	33	41	93	97
Undulant Fever	3	0	10	3
Rocky Mountain Spotted Fever	0	0	0	1
Tularemia	2	2	23	12

VITAL STATISTICS IN THE STATE IN 1945

During 1945, a year comprising somewhat over eight months of wartime and three months of peacetime and reconversion, vital statistics showed the same trends for Virginia as in the three preceding war years.

Births maintained a high wartime rate, although the rate of 22.8 per 1,000 population in 1945 was lower than the other war years. An increase of 8 per cent is seen, however, over the rate for the last prewar year, 1941. According to preliminary figures, there were 64,000 births recorded in the State in 1945, of which 47,424 were white and 16,576 were colored.

Deaths from all causes in Virginia in 1945 totaled 28,400 with a rate of 10.1 per 1,000 population. There were 19,284 white deaths with a rate of 9.0, and 9,116 colored, with a rate of 13.4. This represents a continuation of a steady downward death trend, with a decline of 145 deaths over the previous year.

Infant and maternal mortality both established new low records in 1945. According to preliminary figures, there were 3,100 deaths of infants under one year, with a rate of 48.3 per 1,000 live births. Deaths from puerperal causes numbered 138 (rate 2.2) in comparison with 182 maternal deaths (rate 2.8) for the preceding year.

A decline in mortality in 1945 over the previous year was noted for six of the communicable diseases as follows: Epidemic meningitis from 87 deaths in 1944 to 53 in 1945; whooping cough from 102 to 72; measles from 52 to 3 (the lowest on record); poliomyelitis from 59 to 20; influenza from 531 to 330; and pneumonia from 1,411 to 1,349. The six epidemic diseases showing increases over the preceding year were: typhoid fever from 11 deaths in 1944 to 18 last year; scarlet fever from 8 to 12; Rocky Mountain spotted fever from 12 to 20; diarrhea-dysentery from 430 to 504; and tuberculosis (all forms) from 1,287 to 1,309. The largest increase occurred in deaths from diphtheria, from 23 in 1944 to 44 last year.

Deaths from motor-vehicle accidents rose from 588 in 1944 to 679 in 1945. Other accidental deaths, however, showed a decline from 1,561 to 1,439 last year.

According to preliminary figures, there were 34,200 marriages in the State in 1945, which represents a considerable increase over the past two years, although the number did not reach the wartime peak of 40,443 in 1942.

The number of divorces during the past decade has increased steadily and rapidly, with a maximum record of 7,002 decrees granted in the State in 1945. In addition to these, there were 202 annulments of marriage.

XUM

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

President—MRS. P. M. CHICHESTER, Abingdon
President-Elect—MRS. J. E. HAMNER, Petersburg
Recording Secretary—MRS. NATHAN SCHUMAN, Alexandria
Corresponding Secretary—MRS. L. C. BRAWNER, Richmond
Treasurer—MRS. REUBEN F. SIMMS, Richmond

Sketch of the Leigh-Hodges-Wright Memorial Bed Fund.

In 1936 a resolution* was adopted by the Woman's Auxiliary to the Medical Society of Virginia to assume the expense of supporting an "Auxiliary Bed" in one of our state tuberculosis sanatoria, to be used by a physician, or some member of a doctor's family. The members of the Advisory Council were much interested in this project, and the matter was taken up with those in charge of the sanatoria at Blue Ridge and Catawba, who thought a real service could be rendered by such a plan.

During the first months after the adoption of this plan, the fund was used to assist the daughter of a retired physician, who was then a patient at Blue Ridge. After she had been discharged, we were asked by Dr. Brown to consider a young man who had to enter the sanatorium just one month before getting his degree in medicine at the University of Virginia. The Auxiliary found much real satisfaction and pleasure in being able to render assistance to this young man for several years, until he was able to leave the sanatorium.

In 1938 it was voted to adopt the name "Leigh-Hodges-Wright Memorial Bed", in honor of the memory of these three physicians who had all been members of the State Advisory Council.

At the present time, the fund is not being used, though it is available at any time there should be a call for it. Last year we were advised by our Advisory Council to hold the fund and make an effort to build it up, with the hope that it might some day become enough for an endowment.

It is a known fact that war always increases the spread of tuberculosis, and it is the hope of the committee that we will be prepared to meet an emergency at any time, should such occur.

ANNE SEAY WRIGHT
(MRS. FLETCHER J. WRIGHT) *Chairman,*
Leigh-Hodges-Wright Memorial Bed Fund.

*Published in the VIRGINIA MEDICAL MONTHLY, May, 1944.

NOTE—

Dear Co-Workers: Will you please clip and save this article for your files?

Sincerely,
MARIE C. CHICHESTER.

The Northampton-Accomac Auxiliary

Held its regular quarterly meeting at the home of Mrs. J. L. DeCormis at Accomac on April 9th.

A committee was appointed, with Mrs. W. J. Sturgis as chairman, and Mrs. J. L. DeCormis, Mrs. C. E. Critcher and Mrs. W. Carey Henderson, to meet with the doctors and hospital board with reference to the establishment of a memorial to the late Grace Wilkins Holland, now the major project of the Auxiliary.

Mrs. J. L. DeCormis presented the silver vase attendance trophy to the Auxiliary for the third time.

Mrs. W. Carey Henderson read Governor Tuck's proclamation on cancer control in Virginia, and stressed the saving of lives, the importance of yearly examinations, giving the signs and danger signals of cancer, and urged the support of the Virginia Cancer Foundation for clinics and research.

Mrs. Kellam Ames, chairman of public relations, spoke on juvenile delinquency, and urged the organizing of Girl Scout Troops to help overcome juvenile delinquency, stressing the need of trained councillors, as there are none on the Eastern Shore, and asked that the doctors' wives try to do something towards this need in their communities.

Mrs. J. Fred Edmonds, as chairman of the program committee, presented Mrs. W. L. Cosby, and her daughter, Mrs. Polk Kellam, who gave a delightful program of spring music, including violin selections from Grieg, Borowski, Lawrence Hope, and Fritz Kreisler. A social period with delightful refreshments followed.

An invitation was accepted by the Auxiliary from

XUM

Mrs. W. L. Cosby for an all day picnic at her cottage at Silver Beach on July 9th.

CATHERINE R. TROWER (MRS. HOLLAND),
Chairman, Press and Publicity.

Norfolk Auxiliary.

The Auxiliary to the Norfolk County Medical Society held its annual luncheon meeting, March 26th, at the Norfolk Yacht and Country Club.

A business meeting preceded the luncheon with Mrs. C. M. McCoy, president, presiding. Mrs. Southgate Leigh, Mrs. R. M. Reynolds and Mrs. W. E. Butler were appointed to the nominating committee, and Mrs. James W. Anderson, Mrs. Mallory Andrews and Mrs. Butler on a special committee to confer with representatives of the medical society on a suitable gift from the auxiliary to the society.

It was reported that approximately 100 names had been signed to a petition supporting a bill to be introduced in Congress to replace the Wagner-Murray-Dingell bill for federalized medicine.

Mrs. Peyton Chichester of Abingdon, president of the Auxiliary to the Medical Society of Virginia, was a guest at the meeting and spoke to members briefly on the social, philanthropic and legislative functions of the Auxiliary.

Dr. James V. Bickford, pediatrician and consultant in the adjustive services division of the city schools, was the guest speaker, his subject being "What is the School's Responsibility Towards the Pre-Delinquent Child?"

(MRS. M. F.) CLARA P. BROCK,
Chairman, Press and Publicity.

BOOK ANNOUNCEMENTS

Books received for review are promptly acknowledged in this column. In most cases reviews will be published shortly after the acknowledgment of receipt. However, we assume no obligation in return for the courtesy of those sending us same.

Synopsis of Physiology. By ROLLAND J. MAIN, Ph.D., Professor of Physiology, Medical College of Virginia, Richmond. St. Louis. The C. V Mosby Company. 1946. 341 pages. Illustrated. Cloth. Price $3.50.

Modern Management in Clinical Medicine. By F. KENNETH ALBRECHT, M.D., S.A., Surgeon, U. S. Public Health Service; Kansas State Tuberculosis Consultant; Formerly Clinical Director, U. S. Marine Hospital, Baltimore, Md. Baltimore. The Williams & Wilkins Company. 1946. ix-1238 pages. Illustrated. Cloth. Price $10.00.

The Osseous System. A Handbook of Roentgen Diagnosis. By VINCENT W. ARCHER, M.D., Professor of Roentgenology, University of Virginia, Department of Medicine. The Year Book Publishers, Inc., Chicago. 1945. 320 pages. Illustrated. Price $5.50.

This is short, concise book containing three hundred and eleven pages, with one hundred and forty-eight plates of excellent reproductions of radiographic films showing bone injuries and bone diseases. It is written for the neophyte in x-ray and does not attempt to give exhaustive detail concerning these two pathological conditions. The technic and discussion of good bone detail should be very valuable to the beginner.

It discusses and illustrates the difference between the normal findings and the abnormal, and tells how to avoid mistaking the normal for the abnormal findings. It also tells how to demonstrate a fracture by x-raying bones at different angle modifications from the conventional positions.

On his discussion of the spine, Dr. Archer considers injuries and anomalies. The division of each section is rather unique in that he classifies the disease according to the radiological findings. For instance, the spine is divided into those diseases which cause vertebral compression without joint involvement; those with new bone formation and no destruction.

The section on Bone Diseases and Abnormalities is classified according to those conditions exhibiting periosteal thickening, the anemias, developmental defects, aseptic necrosis, and ends of long bones as well as bone texture.

The last section describes bone diseases occurring in adult life. Classification here is made in the same way as in the previous section, such as, diseases causing periosteal thickening, increase in bone density, etc.

There is an excellent bibliography at the end of each section for the benefit of him who desires to go into more detail. Altogether, it is a good book for "the occasional radiographer" to own; and it is invaluable as a quick reference book for the experienced radiologist.

D. V. KECHELE, M.D.

One Hundred Years of Gynaecology. By JAMES V. RICCI, A.B., M.D., Clinical Professor of Gynaecology and Obstetrics, New York Medical College; Director of Gynaecology of the City Hospital and of Columbus Hospital, New York; Attending Gynaecologist and Obstetrician, Flower and Fifth-Avenue Hospitals; Consultant, Beekman and Downtown Hospitals; Fellow, New York Academy of Medicine, etc. The Blakiston Company, Philadelphia. 1945. 651 pages. Price $8.50.

This is a companion volume of *Genealogy of Gynaecology* (1943), which brought the history of Gynaecology up to 1800. Unfortunately for the pleasure of continuous reading, references are so numerous that at times one feels as though he were reading a page of the Index Catalogue. Apparently the author has not omitted a reference to a single gynaecological work. For instance, he gives credit to John B. Strachan of Virginia for the first successful excision of the cervix "in a scirrhous state" in 1829. The index of personal names in double columns occupies 69 pages. It is a book that every one interested in gynaecology will want to keep where he can refer to it frequently, for it gives quickly the historic background of any phase of gynaecology in which he may be interested.

M. P. R.

American Red Cross First Aid Textbook. Prepared by The American Red Cross for the Instruction of First Aid Classes. Revised. With 264 Illustrations. The Blakiston Company, Philadelphia. 1945. Pamphlet of ix-254 pages.

The doctor, first aid instructor, and general public will certainly welcome this new edition of American Red Cross First Aid textbook, the first since 1937. The doctor will be glad to note that truly outstanding authorities in their fields have had a part in this manual.

It is interesting to see that recent changes in principles of treatment are incorporated in this edition.

The 246 pages are divided into 12 chapters, 9 of which deal with practical treatment of injuries. The other 3 chapters are devoted to the why of first aid, elementary anatomy, and list of contents of first aid. The illustrations are well done, the bold face type of essential principles is appropriate; the book is firmly bound and the printing excellent.

The younger doctor may find useful practical therapy which he may have missed in theoretical and clinical lectures. The book would serve as an excellent text for a short first aid course in medical school.

PAUL ROBINSON.

What People Are. A Study of Normal Young Men. By CLARK W. HEATH. In Collaboration with Lucien Brouha, Lewise W. Gregory, Carl C. Seltzer, Frederic L. Wells, and William L Woods. The Grant Study, Department of Hygiene, Harvard University. Harvard University Press, Cambridge, Mass. 1945. ix-141 pages. Price $2.00.

This book is an unusual medical volume in that it is about normal people, not a single part of it deals with the sick or abnormal. The author feels that knowledge of the normal is of great concern to medicine, education, business and government.

The authors have been engaged in cooperative study of normal people for a six-year period. The report concerns chiefly the study of selected Harvard undergraduates, also groups of men from the armed forces and in civilian life. The college students were selected as to good adjustment, good health and academic success.

They define the normal person as the individual with a balance of traits of many kinds that allows him to function effectively.

The approach is on a clinical basis. The characteristics of normal young men are described from the point of view of medicine, physiology, anthropology, mental measurement, socio-economics and psychiatry. Divergent personalities are based on variability of characteristics.

In section one the volume offers introductory divisions giving the needs for a study of normal individuals, the aims and purposes; the selection of participants with the methods of examining them.

In section two the book treats with description of normal young men from the point of view of different disciplines.

The personality summary is based on appearance, manner, expressive movements, speech, athletic activities, outdoor life, scholastic aptitude, social activities and personality structure. Tables are presented to explain the studies made.

The authors do not consider this a completed work. They wish many hands will attempt the same studies in different localities.

The volume was enjoyed. It offers a new approach in the study of personalities which deviates from the psycho-biological viewpoint. I recommend it to be read by students, nurses, psychologists and physicians.

VINCENT EDWARD LASCARA, M.D.

XUM

Editorial

Change in Management at McGuire General Hospital

ON April first the Army turned over the McGuire General Hospital to the Veterans' Administration. At the exercises marking the occasion General Hawley made the significant statement that if the resident staff did not make their specialty boards it would be the fault of the visiting staff: either the visiting staff did not give the resident staff proper instruction or the resident staff was incompetent. In the latter case the visiting staff should have reported the incompetency so that the incompetent member or members could have been removed. Such a dictum speaks well for the hospital. A hospital whose residents must make their respective boards is a hospital with a wide awake and interested staff; and a hospital whose visiting staff has the responsibility of seeing that the residents become qualified specialists is a hospital whose patients will have the best possible care.

Col. P. E. Duggins has been commanding officer at the McGuire General Hospital since it was opened in June 1944. Among his good qualities is a well developed appreciation of good public relations. As the result of Col. Duggins' wisdom, the community has thought well of the hospital from the very beginning. The medical personnel attended the meetings of the Academy of Medicine and the Academy members attended special meetings in the McGuire Hospital. We still remember with pleasure the program of the Academy of Medicine on November 14, 1944, that was put on by Col. Duggins, Lt. James H. Semans, Major D. S. Pepper and Capt. William H. Jeffers.

There was always a friendly relation between the two groups. We will miss Col. Duggins and his staff and we wish them Godspeed. It is to be hoped that the new staff will be as friendly as the old one. The MONTHLY promises its best endeavors to make the new doctors at the McGuire Hospital feel at home in Richmond.

Bernard Shaw and Medicine

ON another page is published a communication from Dr. Guy Hinsdale who takes exception to Shaw's silly tirade against Lord Lister. The occasion of the Shavian eruption was the appearance of a very excellent history of medicine by Dr. Douglas Guthrie. Dr. Guthrie's book first appeared in September 1945 and already has had a second printing. In it he traces the progress of medicine from Imhotep to Sir William Osler. There is an excellent chapter on the Lister place in surgery. Before Lister there was no surgery as we know it today, because wounds rarely healed except with "laudable pus" and patients died of sepsis. Impressed with Pasteur's demonstration that putrefaction and fermentation were identical processes and the result of bacterial growth, Lister proceeded to eliminate bacteria from all wounds. The idea was so new that he had no precedents to go by; consequently he had to do a lot of experimenting. The important thing was that he proved his point and made surgery safe. That he used carbolic acid is a mere detail and Shaw blunders as usual when he overlooks the fundamental truth to take a crack at carbolic acid. Our Irish Wit makes the astounding statement that Sir Almroth Wright gave the *coup de grace* to "antiseptic carbolic surgery" by proving that the best wound dressing was a 10 per cent salt solution in pipe water, a discovery he made by analyzing the soap and sugar poultices used for wounds by the peasant women of Ireland.

One of Shaw's pet delusions is that vaccination does not protect against smallpox. Another delusion is that pathogenic microbes are products of the zymotic diseases; that these diseases are products of ugliness, dirt and stink, offending every aesthetic instinct,

All this makes good profitable writing for Mr. Shaw but it would be a poor guide for public health officials. Another great Irishman has said "There is none so blind as they that won't see", which is the most charitable explanation of Mr. Shaw's writings upon medical subjects.

The provocative Mr. Shaw perverted us from what we started out to say, which is, that it is incredible that some of us now living could have seen and taken part in the beginnings of modern surgery—could have actually used the sea sponges of the pre-Listerian era and the large steam atomizers that Lister introduced.

Legislative Trends in Washington

AMONG the new bills introduced in Congress with medical implications are the following:

S. 1850 by Mr. Kilgore of West Virginia. A Bill to promote the progress of science and the useful arts, to secure the national defense, to advance the national health and welfare, and for other purposes. This bill was drafted by the War Mobilization subcommittee of the Senate Military Affairs Committee, after holding hearings in joint session with a Commerce subcommittee on S. 1285 and S. 1297 and S. 1720.

S. 1865 by Mr. Radcliffe of Maryland. A Bill directing the Secretary of Commerce, through the Bureau of the Census, to make a survey of physically handicapped citizens.

S. 1875 by Mr. Pepper of Florida. A Bill to authorize and request the President to undertake to mobilize at some convenient place in the United States an adequate number of the world's outstanding experts, and coordinate and utilize their services in a supreme endeavor to discover means of curing and preventing cancer. The bill would authorize $100,000,000 for cancer research.

S. 1883 by Mr. Langer of North Dakota. A Bill authorizing the appropriation of $3,750,000,000 for use in making studies relating to the prevention, diagnosis, and treatment of cancer.

S. 1891 by Mr. Langer of North Dakota. A Bill to protect the public health through the detection of certain diseases, and for other purposes. The Surgeon General is authorized to provide means for securing a specimen of urine of each person of the United States and providing for its examination and analysis. A report of the findings is to be made to the person furnishing the specimen and detection of the presence of disease is to be reported to health authorities of the community. Specimens are not to be collected "more often than once every six months".

H. R. 5572 by Mr. Lemke of North Dakota. A Bill to prohibit experiments upon living dogs in the District of Columbia and providing a penalty for violation thereof. Differs from H. R. 491 in excepting "operations normally performed for the convenience of the owner and welfare" of the dog.

H. R. 5685 by Mr. Rogers of New York. A Bill to provide for the national health and productive power of the people of the United States by clarifying the laws pertaining to hospital treatment, medical care, domiciliary care, and related services, and for other purposes. Provides for additional immediate construction of hospitals of bed capacity of 57,000. Also the building of the necessary associated branches of medical services to make the Veterans' Administration a complete medical center within itself which will have its own research laboratories, medical flying corps for quick transportation of serums, equipment, and patients from one specialty to another. It will also provide the Veterans' Administration with fact-finding proving centers to determine the merits of healing arts which heretofore have not been considered.

XUM

H. R. 5628 by Mr. Priest of Tennessee, February 28. A Bill to amend the Public Health Service Act to authorize grants to the States for surveying their hospitals and public health centers and for planning construction of additional facilities, and to authorize grants to assist in such construction. Referred to the Committee on Interstate and Foreign Commerce. This is the latest hospital construction bill, the others being H. R. 2498, H. R. 3561, H. R. 2755, H. R. 3845 and S. 191. H. R. 5628 is S. 191 with the amendments incorporated which were offered by Senator Murray but rejected when S. 191 was passed by the Senate.

S. 1888 by Mr. Langer of North Dakota. A Bill to authorize the appropriation of $3,750,000,000 for use in combating infantile paralysis. The bill states, in part, "The funds authorized to be appropriated—shall be disbursed by the Secretary of the Treasury upon vouchers approved by Sister Kenny".

A State-Wide Survey of Pediatric Needs and Facilities Conducted by Doctors Themselves

Attention is directed to a communication in "The Forum", describing a survey that the Virginia Pediatric Society is undertaking. It is a part of a nation-wide program that was initiated by The American Pediatric Society and is sponsored by the American Academy of Pediatrics. The Virginia survey has the approval of Dr. J. L. Rawls, President of the Medical Society of Virginia. Give Mr. Burnette the glad hand when he comes around.

Societies

Alexandria Medical Society.

At the regular meeting of this Society on April the 11th, the following were elected officers for the coming year: President, Dr. James A. Gooch; vice-president, Dr. C. E. Arnette; and secretary-treasurer, Dr. R. F. Benthall. All are of Alexandria.

Plans were made for the annual banquet which will be held at the George Mason Hotel in that city on May the 18th, at which time the new officers will be installed.

Buchanan-Dickenson County Medical Society.

Officers for the year elected at its annual meeting are: President, Dr. C. H. Reagan, Grundy; vice-president, Dr. Thornton Kell, Grundy; and secretary-treasurer, Dr. T. C. Sutherland, Haysi. This society meets every 3rd Wednesday night at the Grundy Hospital, and has an average attendance of about fifteen members. At recent meetings interesting war experiences have been reported by Drs. James P. Williams, Richlands; J. S. Richardson, Grundy; F. H. Holt, Grundy; Joshua P. Sutherland, Harman; and W. B. Trivett, Big Rock.

The town of Grundy recently voted for a modern water system which was carried almost unanimously and was endorsed by the Buchanan-Dickenson Society.

Lynchburg Academy of Medicine.

At the March 4th meeting of the Academy, Dr. George Cooper, Associate Professor of Roentgenology at the University of Virginia, was the guest speaker, his subject being "Cancer in General Practice". After his interesting paper, Mrs. Augusta Firth Jarman, Executive Secretary of the Virginia Cancer Foundation, outlined the procedures to be followed for certification of indigent cancer patients. Announcement was made of the opening of the Lynchburg Tumor Clinic, approved by and affiliated with the Foundation. Meetings will be held on Tuesdays at 2:00 o'clock at the Lynchburg General Hospital for diagnostic and follow-up studies.

Present officers of the Academy are: President,

Dr. E. A. Harper and secretary, Dr. H. W. Hollingsworth. Reported by

JOSEPH W. HOUCK.

The Patrick-Henry Medical Society

Held its regular quarterly meeting in Martinsville on April 12th. The meeting was called to order by Dr. T. H. Dickerson, President, and the following program was presented: Dr. W. A. Porter, Councilor of the Fifth District, gave an interesting report of the activities of the Medical Society of Virginia and the efforts being made to counteract the possibility of "state medicine"; Dr. B. A. Hopkins gave an interesting paper on "The General Practitioner and Rural Medical Care", bringing out many of the problems confronting the rural general practitioner and suggested methods to improve rural medical care; Dr. J. T. Shelburne gave a report on the Tri-State Medical Society meeting held in Richmond in February. Drs. C. J. Axelson, M. C. Rowe, and J. W. Clark, all of Martinsville, were elected to membership. Dr. W. N. Thompson, Stuart, is secretary of this Society.

The Medical Society of Northern Virginia

Held its regular meeting at Mimslyn Hotel in Luray on April the 9th, at which time the following program was presented:

Office Gynecology—Dr. Pembroke T. Grove, Winchester.

Encephalo-Myelitis—Dr. William E. Lynn, Front Royal.

General Surgery in Navy as Contrasted to Civilian Life—Dr. James A. Miller, Winchester.

The Anemias—Dr. Byrd Leavell (Guest), University of Virginia.

Luncheon followed the meeting.

This Society holds three meetings a year—April, August and December. Officers at this time are: President, Dr. G. G. Crawford, Strasburg; vice-president, Dr. D. M. Kipps, Front Royal; secretary-treasurer, Dr. H. I. Pifer, Winchester.

Roanoke Academy of Medicine.

At the regular meeting of the Academy on April 1st, the following program was presented: "War Medicine and Its Transition to Post-War Conditions" by Rear Admiral Ross T. McIntire, Surgeon General, U. S. Navy, and Director of the Bureau of Medicine and Surgery; and "The Story of Streptomycin" by Dr. Selman A. Waksman, New Brunswick, N. J. These speakers were guests of the Gill Memorial Hospital Post-Graduate Course.

The Southwestern Virginia Medical Society

Held its annual spring meeting on May 3rd in Wytheville under the presidency of Dr. A. P. Jones, Roanoke. The following program was presented at the afternoon session: Gun Shot Wounds of the Pregnant Uterus by Dr. Walter A. Porter, Hillsville; Recent Advances in Intracapsular Cataract Surgery by Dr. E. G. Gill, Roanoke; Perforating Peptic Ulcer by Dr. Harry M. Hayter, Abingdon; and Coronary Insufficiency by Dr. J. E. Gardner, Roanoke. The banquet was held at 6:30 after which the following guests were presented: Dr. Edward M. Hanrahan, Baltimore, who spoke on Some of the Typical Procedures in Plastic Surgery; and Dr. J. M. T. Finney, Jr., also of Baltimore, his subject being Gall-Bladder Disease with Special Reference to Cancer of the Gall-Bladder.

Dr. A. F. Giesen, Radford, is secretary-treasurer of this Society.

Norfolk County Medical Society.

Recent programs of this Society have included the following speakers:

Dr. Thomas N. Spessard, Norfolk, on March 25—A Brief Appraisal of Modern Psychiatric Therapy;

Dr. F. D. Costenbader, Washington, D. C., on April 8—Aids in the Ophthalmic Examination of Children;

Dr. Walter B. Martin, Norfolk, on April 22—Malaria.

Dr. Foy Vann and Dr. Lockburn B. Scott are president and secretary, respectively.

The Virginia Peninsula Academy of Medicine,

At its regular meeting on April the 15th, was addressed by Dr. Cless Y. Fordyce of Baltimore, his subject being "Choice of Anesthetic and Avoidance of Complications". Dr. Harvey G. Bland of Newport News presided at the meeting which had an attendance of sixty-three. Dr. C. D. Bradley, also of Newport News, is secretary-treasurer, and Dr. Russell Buxton vice-president.

Hopewell (Va.) Medical Society.

This Society at its annual meeting elected Dr. F. M. Howell as president, and Dr. J. S. Williams as secretary.

XUM

News

The 1946 Meeting, Medical Society of Virginia,

Is to be held at the Cavalier Hotel, Virginia Beach, October 14, 15 and 16, under the presidency of Dr. Julian L. Rawls of Norfolk. The Norfolk and Princess Anne County Societies will be hosts for this occasion and the following Committee of Arrangements has been named: Dr. A. B. Hodges, chairman, and Drs. N. F. Rodman, C. C. Smith and C. M. McCoy from the Norfolk Society, and Drs. Ira Hancock, H. F. Dormire and C. Z. Corpening from the Princess Anne.

The management of the Cavalier will handle all reservations and suggests that these be made promptly on account of their limited capacity. They have given a rate of $20.00 daily, two persons in twin bedded room, and $12.00 daily for single room, both with private baths. These are on American plan and include, in addition to meals, swimming in the indoor pool, tennis, and banquet to those registered in the hotel, without extra charge. Two 18-hole golf courses at the Princess Anne Country Club and the Cavalier Country Club are at the disposal of those registered at the Cavalier. There are several other hotels, open the year round, and reservations will be made in these when the Cavalier is full. As convention hotels and those wishing to stay at headquarters have been greatly inconvenienced by last-minute cancellations, the Cavalier management feels it should have payment for one day with request for reservation, or at least 48 hours notice of cancellation by wire or phone, in order that they may accommodate others who may wish to attend. Please bear this in mind in making reservations.

Owing to the limited time for scientific work, it has been suggested that golf and tennis tournaments be held on Sunday preceding the meeting, if sufficient interest is manifested to arrange for these. It is therefore suggested that those interested advise the Society's office promptly, that arrangements may be made if it is deemed feasible.

University of Virginia.

The Commencement exercises of the School of Medicine of the University of Virginia were held on March 20th. The address was delivered by Rear Admiral Kent C. Melhorn, Medical Corps, United States Navy, and diplomas were presented by President John Lloyd Newcomb. The sixty-five graduates, with hospital appointments, are as follows:

UNIVERSITY OF VIRGINIA HOSPITAL, Charlottesville—Drs. Frank Kimball Abbot, Quincy, Ill.; Harry Duffield Cox, Portsmouth; Arthur Ebbert, Jr., Wheeling, W. Va.; Jack Warren Hollowell, Portsmouth; Morris Arthur Lambdin, Rocky Mount; Walter Copley McLean, South Hill; Charles Wesley Merritt, Boyle, Miss.; Herbert Nicholas Munhall, Jr., Alexandria; Philip Foster Murray, Fairfax; Milton Lewis Rosenberg, Morristown, N. J.; and Russell Arthur Salton, Williamson, W. Va.

BLUE RIDGE SANATORIUM, Charlottesville—Dr. Harry Jackson Hyer, Sutton, W. Va.

MEDICAL COLLEGE OF VIRGINIA, Richmond—Dr. James Bryon Hutcheson, III, Roanoke.

PORTSMOUTH NAVAL HOSPITAL, Portsmouth—Dr. Thomas Hancock Garth, Charlottesville.

PHILADELPHIA GENERAL HOSPITAL, Philadelphia, Pa.—Drs. Leon Ashby Adams, Warrenton, N. C.; and Lane Ameen, Hopewell.

PHILADELPHIA NAVAL HOSPITAL, Philadelphia, Pa.—Dr. Sam Dixon Graham, Charlottesville.

MONTGOMERY HOSPITAL, Norristown, Pa.—Dr. Charles Wenger Hertzler, Denbigh.

ST. LUKE'S HOSPITAL, Bethlehem, Pa.—Dr. Dennis Parfrement McCarty, Delaplane.

STRONG MEMORIAL HOSPITAL, Rochester, N. Y.—Dr. Frank McFaden Blanton, Richmond.

LONG ISLAND COLLEGE HOSPITAL, New York—Dr. Robert Barrett, Gahagan, Jackson Heights, N. Y.

PUBLIC HEALTH SERVICE, Staten Island, N. Y.—Dr. Wayland Jackson Hayes, Jr., Nashville, Tenn.

KING'S COUNTY HOSPITAL, Brooklyn, N. Y.—Drs. Bernard Herman Kasinoff, Brooklyn, N. Y.; Howard Israel Kruger, Norfolk; and Morton Charles Wilson, Brighton, Mass.

BETH ISRAEL HOSPITAL, New York, N. Y.—Dr. Charles Kessler, Malden, Mass.

PRESBYTERIAN HOSPITAL, New York, N. Y.—Dr. William Whitehurst Old, III, Norfolk.

XUM

NEW YORK HOSPITAL, New York, N. Y.—Dr. Samuel Randolph Penn, Roanoke.

LENOX HILL HOSPITAL, New York, N. Y.—Dr. Lula Johnson Power, Abbeville, S. C.

ST. LUKE'S HOSPITAL, New York, N. Y.—Dr. Robert Legare Reeves, Madison, N. J.

KNICKERBOCKER HOSPITAL, New York, N. Y.—Dr. Benito Benjamin Rish, Mexico City, Mex.

GRASSLANDS HOSPITAL, Valhalla, N. Y.—Dr. Raymond Herbert Stokes, Waynesboro.

HERMANN HOSPITAL, Houston, Tex.—Dr. Thomas Alred Anderson, Houston, Tex.

SINAI HOSPITAL, Baltimore, Md.—Drs. Royce Lee Brown, Norfolk; and Leon Moses Kruger, Norfolk.

ST. JOSEPH'S HOSPITAL, Baltimore, Md.—Dr. Gunyon Mitchell Harrison, Fredericksburg.

UNION MEMORIAL HOSPITAL, Baltimore, Md.—Drs. Jacquelin Marshall Harrison, Richmond; and Mark Edgar Holt, Jr., Petersburg.

ORANGE MEMORIAL HOSPITAL, Orange, N. J.—Dr. David Staats Burnet, Charlottesville.

MEDICAL CENTER, Jersey City, N. J.—Dr. Homer Rodeheaver Justis, Lynchburg.

HILLMAN-JEFFERSON HOSPITAL, Birmingham, Ala. Dr. James Joseph Bushnell, Childersburg, Ala.

NORWOOD GENERAL HOSPITAL, Birmingham, Ala. —Dr. Edmund Cape Payne, Jr., Newcastle, Ala.

TENNESSEE COAL AND IRON HOSPITAL, Birmingham, Ala.—Dr. John Alan Stough, Montgomery, Ala.

UNIVERSITY OF MINNESOTA HOSPITAL, Minneapolis, Minn.—Dr. Gilbert Sadler Campbell, Jr., Charlottesville.

BARONESS-ERLANGER HOSPITAL, Chattanooga, Tenn. —Drs. William Everett Carter, Alexandria; and Paul Shafer Stonesifer, Roanoke.

BAPTIST MEMORIAL HOSPITAL, Memphis, Tenn.—Dr. Walter Stevens Ridgway, II, Jackson, Miss.

MEMORIAL HOSPITAL, Worcester, Mass.—Dr. Geoffrey William Curwen, Monroe, Ohio.

CHILDREN'S HOSPITAL, Boston, Mass.—Dr. Malcolm Alexander Holliday, Charlottesville.

WORCESTER CITY HOSPITAL, Worcester, Mass.—Dr. Earl Tracy Owen, Lynchburg.

BOSTON CITY HOSPITAL, Boston, Mass.—Dr. Wesley Calhoun Palmes, Jr., Mobile, Ala.

BETH ISRAEL HOSPITAL, Boston, Mass.—Dr. Herbert Ralph Silverman, Danville.

LAKESIDE HOSPITAL, Cleveland, Ohio.—Dr. Walter Lee Evans, Jr., Lynchburg.

CINCINNATI GENERAL HOSPITAL, Cincinnati, Ohio —Dr. Ruth Wade Holmboe, Charlottesville.

MT. SINAI HOSPITAL, Cleveland, Ohio.—Dr. Joseph Hyman Marko, San Antonio, Tex.

UNIVERSITY OF IOWA HOSPITAL, Iowa City, Ia.—Dr. George Walter Hambrick, Jr., Princeton, W. Va.

MERCY HOSPITAL, Chicago, Ill.—Dr. Robert William Hartley, Clifton Forge.

EMERGENCY HOSPITAL, Washington, D. C.—Drs. Lewis Benton Newman, Arlington; and Robert Lee Price, Norfolk.

BOWMAN-GRAY HOSPITAL, Winston-Salem, N. C. —Dr. William Edmond Rabil, Weldon, N. C.

EMORY UNIVERSITY, Atlanta, Ga.—Dr. Emmett Francis Reese, Courtland.

QUEEN'S HOSPITAL, Honolulu, Hawaii—Dr. Oscar Andreas Thorup, Jr., New York, N. Y.

MONTREAL GENERAL HOSPITAL, Montreal, Can.—Dr. Paul Paine Webb, Newcastle.

VIRGINIA MASON HOSPITAL, Seattle, Wash.—Drs. Robert Bocock Wilkins, Lynchburg; and Charles William Wilson, Staunton.

Spring Clinic of the Norfolk County Medical Society.

The Spring Clinic which had been held annually in Norfolk before the war will be resumed at a one-day meeting to be held May 22, 1946. The morning session will be at the Norfolk General Hospital and the afternoon session at the De Paul Hospital. A luncheon will be served at the Norfolk General Hospital and a social hour followed by a dinner will be held after the afternoon session at the De Paul Hospital. This is primarily a clinical session and no formal papers will be presented. Dr. I. A. Bigger of the Medical College of Virginia will give a clinical program at the afternoon session.

All doctors in the Tidewater section of Virginia and North Carolina are invited to attend.

Dr. West Retires.

Dr. Olin West, perhaps the best known and one of the most popular doctors in this country, retired on April the 1st, after almost a quarter of a century with the American Medical Association. Dr. West may be assured of the good wishes of doctors through-

XUM

out this country and their commendation of his excellent work.

Dr. George F. Lull, formerly Deputy Surgeon General, U. S. Medical Corps, who has been serving as Dr. West's assistant since the first of the year, has succeeded him as secretary and general manager of the Association.

Married.

Dr. John Richard Saunders, Jr., Lynchburg, and Miss Caroline Virginia Doyle, McKenney, March 30th. He is a graduate of the Medical College of Virginia in 1935, and, having recently completed some graduate study at the College, has returned to Lynchburg.

Dr. Samuel Henley Carter, Jr., The Plains, and Miss Katherine Kivlighan, Staunton, March 30th. He is a graduate in medicine from the University of Virginia, class of 1945.

Dr. Sam Dixon Graham and Miss Jane Warwick O'Neill, both of Charlottesville, March 28th. He is a 1946 graduate in the medical school of the University of Virginia.

Dr. A. B. Gravatt, Jr.,

Kilmarnock, has been appointed Lancaster County Coroner to succeed the late Dr. M. C. Oldham.

State Department of Health Personnel Changes.

Dr. B. R. Allen, recently released from the Army, was appointed Director of the Bureau of Communicable Diseases as of April 1st.

Dr. E. C. Harper, Director of Tuberculosis Out-Patient Service and the Crippled Children's Bureau, resigned as of May 1st to become Assistant Chief, Tuberculosis Control Program, 4th District, Veterans Administration.

Dr. C. E. Waller, Health Officer of Loudoun County, and Dr. Nelson Podolnick, Health Officer of Fairfax-Prince William-Stafford Health District, resigned as of April 1st.

Dr. S. D. Gardner, assistant director of rural health, has resigned, effective May 15th, and will enter private practice in San Antonio, Texas.

Dr. J. Belmont Woodson, superintendent and medical director of Piedmont Sanatorium, has resigned after fifteen years of directing that institution.

News from the University of Virginia.

At the meeting of the University of Virginia Medical Society on Monday, March 4, Dr. Marius Nygaard Smith-Petersen of Harvard University spoke on the subject, "Arthroplasty of the Hip with Vitallium Mold".

Graduation exercises for a class of sixty-five were held on March 20. The address to the graduates was delivered by Rear Admiral Kent C. Melhorn. In connection with the graduation exercises there were delivered thirty-nine commissions in the Army of the United States and twenty commissions in the U. S. Naval Reserve.

Dr. Oscar Swineford, Jr., Professor of Practice of Medicine, was a member of the faculty of the postgraduate course in Allergy held in New Orleans, March 8-12 under the sponsorship of the Department of Medicine, Louisiana State University and of the American Academy of Allergy. His subjects were "Physical Allergy", "Neurologic Allergy", and "Contact Dermatitis".

Dr. Swineford also read a paper at the meeting of the Southeastern Allergy Association in Atlanta, March 30, on the subject of "Contact Dermatitis".

On April 19, Dr. Eugene M. Landis, Professor of Physiology in the School of Medicine of Harvard University, gave the annual Alpha Omega Alpha address. He spoke on "Venous Pressure and Cardiac Failure in the Laboratory and Clinic".

McGuire General Hospital Transferred to Virginia.

On Sunday, March 31st, ceremonies were held for the transfer of this Hospital from the Army to the Veterans Administration. Major-General Paul R. Hawley, chief medical director of the VA was the principal speaker. He was in charge of all Army medical activities in the European theatre during World War II and recently went on inactive duty. Brigadier-General G. W. Rice, chief surgeon, Third Service Command, Baltimore, also spoke and read the formal order inactivating McGuire as an Army institution. Speaking on behalf of the 200 soldier patients in the hospital was First Sergeant Henry I. Hickman, Jr., of Lexington, who has been a patient at the hospital since June 1945. There was also a concert by the famous Quantico Marine Band.

XUM

Approximately 200 patients remained in the hospital, but it is being set up under VA as a 1,000 bed institution and patients are expected to begin coming in soon at a rapid rate.

Dr. Edmund Ellerson will be manager of the hospital and the following have been selected from the staff of the Medical College of Virginia for positions on the staff: Drs. James P. Baker and Charles Caravati as medical consultants: Drs. A. Stephens Graham, Guy W. Horsley, and Harry J. Warthen as surgical consultants; Drs. Frank P. Coleman, Patrick H. Drewey, Jr., Marshall P. Gordon, Jr., William R. Hill, William A. Johns, John R. Massie, Jr., Sidney G. Page, Allen W. Pepple, E. W. Perkins, W. Morris Pinckney, Reno R. Porter, Benjamin W. Rawles, Jr., Wellford C. Reed, Edwin M. Rucker, R. C. Siersema, W. Taliaferro Thompson, Jr., Elam C. Toone, Jr., Charles E. Troland, Gilman R. Tyler and T. Duval Watts as attending physicians.

American Medical Association.

Official call has been issued for the 95th annual session of the Association to be held in San Francisco, from Monday, July 1st to Friday, the 5th. The House of Delegates will convene on Monday, and the Scientific Assembly will open with the General Meeting on Tuesday evening, at 8:00 P. M. The various sections will start their sessions on Wednesday morning.

For those interested in a sight-seeing trip in the far west, the Oklahoma State Medical Association is sponsoring an *all-expense* tour, with the exception of meals. The meeting point will be Kansas City and the time will be sixteen days, including travel time from Chicago through Kansas City and Grand Canyon and return. This will allow five days in San Francisco, a tour through the Northwest, returning through Yellowstone National Park. Detailed information may be secured from Mr. Harry E. Kornbaum, Rainbow Travel Service, Inc., First National Building, Box 652, Oklahoma City, Okla. As the party is to be limited to 200 because of hotel space and Pullman car shortage, those interested should get in touch with Mr. Kornbaum at once.

Dr. Thomas N. Spessard,

Recently released from Service, has opened his office at 712 Botetourt Street, Norfolk, to continue the practice of psychiatry and neurology.

The Spring Travel Clinic

Of the Virginia Obstetrical and Gynecological Society was held at Philadelphia March 25th and 26th. Clinics were visited at The University of Pennsylvania, Philadelphia Lying-In and Jefferson Hospitals.

Those in attendance were Doctors Harrison Picot, Alexandria; T. J. Williams, Charlottesville; S. E. Oglesby, Lynchburg; W. R. Payne, H. G. Bland, Newport News; R. B. Nicholls, P. E. Thornhill, R. S. Kight, M. B. Savage, Norfolk; H. C. Spalding, H. H. Ware, Jr., Edwin Rucker, A. L. Carson, Jr., Spotswood Robins, L. L. Shamburger, Richmond; George S. Hurt, John O. Boyd, Rees Morgan, Roanoke. Guests, Doctors W. N. Thornton, Jr., Charlottesville, and J. C. Parker, Richmond.

Dr. Grant R. Elliott,

Who recently returned to Orange after several years' service in the Army, has given up his work there and accepted a position on the staff of McGuire General (Veterans Administration) Hospital in Richmond.

Jefferson Medical College.

Commencement exercises were held at the Academy of Music in Philadelphia, on Wednesday, March 27, at twelve o'clock. The Degree of Doctor of Medicine was conferred upon 155 men coming from 22 states. The commencement address was delivered by Brooke M. Anspach, M.D., Emeritus Professor of Gynecology, Jefferson Medical College, on "Life, Liberty and the Pursuit of Happiness". The Degree of Doctor of Science was conferred upon Dr. Anspach.

Dr. Robert V. Terrell,

Richmond, announces his return from military service and resumption of practice with Dr. E. H. Terrell in the Medical Arts Building. His practice will be limited to proctology.

Dr. Kinloch Nelson,

Richmond, announces his return from military service and is now associated with the Medical College of Virginia.

Dr. Julien H. Meyer,

Roanoke has been released from active duty with the Army and has opened offices at 306 Rosenberg Building, for the practice of gynecology and obstetrics.

XUM

Back in Civilian Practice.

In addition to those previously announced in the MONTHLY, we have been advised that the following members of the Medical Society of Virginia have been released from Service and have resumed practice:

Dr. B. Randolph Allen, Richmond.
Dr. Emerson Babb, Ivor.
Dr. W. Linwood Ball, Richmond.
Dr. Lee S. Barksdale, Hopewell.
Dr. Milton H. Bland, Norfolk.
Dr. George S. Bowers, Richmond.
Dr. William A. Brown, Jr., Portsmouth.
Dr. Harvey C. Brownley, Lynchburg.
Dr. Fielding J. Crigler, Charlottesville.
Dr. E. M. Ellerson, Staunton (now VA, Richmond).
Dr. Herman W. Farber, Richmond (now Petersburg).
Dr. D. I. Farnsworth, Richmond (now Oteen, N. C.).
Dr. Barnes Gillespie, Hilton Village.
Dr. F. H. Holt, Grundy.
Dr. E. L. Hopewell, Strasburg.
Dr. Chas. F. Kincheloe, Arlington.
Dr. Robt. B. Mallett, Orange.
Dr. Julien H. Meyer, Roanoke.
Dr. John W. Montague, Salem (now Richmond).
Dr. E. R. Moorman, Kilmarnock.
Dr. Fredk. M. Morrison, Lynchburg.
Dr. Harold I. Nemuth, Portsmouth.
Dr. John S. Pearson, Jewell Ridge (now Huntington, W. Va.).
Dr. Thomas E. Painter, Radford (now Richmond).
Dr. John A. Proffitt, Burkeville.
Dr. J. E. Rawls, Jr., Suffolk.
Dr. Samuel L. Rucker, Jr., Moneta.
Dr. George E. Snider, Pulaski.
Dr. W. R. Southward, Richmond.
Dr. Thomas N. Spessard, Norfolk.
Dr. Francis N. Taylor, Petersburg.
Dr. Wm. E. Tomlinson, Richmond.
Dr. W. B. Trivett, Big Rock.
Dr. George D. Vaughan, Jr., Richmond.
Dr. H. H. Wescott, Roanoke.
Dr. William R. Whitman, Jr., Roanoke.
Dr. Ennion S. Williams, Richmond.
Dr. James P. Williams, Richlands.
Dr. Wm. H. Wood, Jr., Charlottesville.
Dr. Munford R. Yates, Petersburg.

Entering Army of the United States.

Dr. Daniel T. Talley, III, of Richmond, and Dr. Randolph P. Pillow of Roanoke,

both of the class of '44, University of Virginia, Department of Medicine, have just entered Service with the rank of First Lieutenant in the Medical Corps.

Veterans Loan Fund.

The Council of the Medical Society of Virginia, at its winter session, authorized the setting aside of a fund of $10,000 to be used in loans to returning veterans for the purpose of post-graduate education or establishing themselves in practice.

This is to be administered by a committee appointed by the Council and any veteran interested should communicate with the executive secretary of the Society, at 1200 East Clay Street, Richmond 19.

Services for Unmarried Mothers and Their Children.

The Children's Bureau is issuing an 18-page handbook for the unmarried mother. This booklet was a joint undertaking of the Children's Bureau, the Bureau of Public Assistance of the Social Security Board, and the American Red Cross. It tells where the "illegitimately born" baby may obtain special case-work, financial assistance, medical nursing, hospital service, legal advice, and assurance of a good family life. Write the Children's Bureau, Department of Labor, Washington 25, D. C., for a free copy of "Services for Unmarried Mothers and Their Children".

Dr. D. I. Farnsworth,

Who was on the medical staff of the Medical College of Virginia for several years before entering the Service, has returned and is now connected with the Veterans Administration at Oteen, N. C.

Dr. O. L. Ramsey Honored.

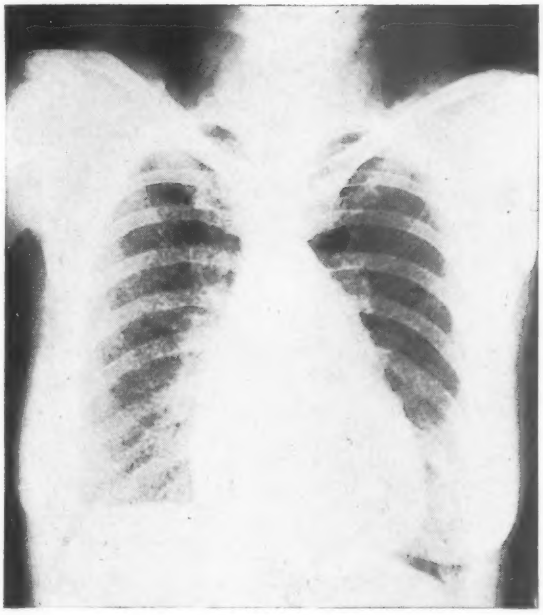
The Lions Club of Chatham recently named Dr. Oscar L. Ramsey of Gretna as the most valuable citizen of Pittsylvania County for 1945, stating that he had given unsparingly of his time for others.

Veterans Administration, Richmond Branch Office.

The number of doctors entering the Veterans Administration's new Department of Medicine and Surgery is showing a steady increase, according to a recent report by Dr. Wilbur R. Southward, assistant medical director in the VA Richmond Branch.

During the 12 weeks of 1946 ended March 28, 'only 41 entered VA service in Virginia, North Carolina, West Virginia, Maryland and the District of Columbia. By April 18, however, that total

congestive heart failure



The de-edematizing action of Searle Aminophyllin decreases the cardiac burden, permitting the heart muscle to function more efficiently.

Searle Aminophyllin produces diuresis whether administered orally or parenterally, and thus has a field of usefulness covering emergencies and chronic congestive cardiac failure.

SEARLE AMINOPHYLLIN

contains at least 80% of anhydrous theophyllin.
G. D. Searle & Co., Chicago 80, Illinois

ACCEPTED AMERICAN MEDICAL ASSN.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

XUM

had reached 96. Twenty-one of these physicians have been appointed members of rating boards engaged in examining veterans' disability claims. The others are in positions ranging from residencies to chief medical officer and consultant.

On April 17, the last day fully covered by the report, nine applications were received by VA in the branch area, and eight doctors were placed. Positions included one chief medical officer, one chief of physical medicine, three full-time staff doctors, two attending physicians (specialists in private practice and serving in VA hospitals part time) and one resident. One attending physician's position was in neurosurgery, the other in dermatology and syphilology.

Of the eight, four joined the McGuire Hospital staff in Richmond, one went to Mt. Alto, in Washington, D. C., and three were assigned to the VA Hospital at Kecoughtan, Va.

Chief reasons for the improvement in the recruitment program, Dr. Southward said, are the enhanced reputation of the VA medical service brought about by new policies, the attraction of modern facilities and working conditions being installed at a time when many young men have found it almost impossible to find space and equipment to open their own practice, and the unprecedented opportunities being offered both for practice in widely varied fields and for specialized studies under the prominent men working with VA through the Dean's Committees.

Dr. Southward reported that additional specialists and general practitioners will be engaged for the present in hospitals and clinics in the area as well as for the seven new hospitals, totaling 3,371 beds, which are to be built during the next two years. Figures received from hospitals and other installations as of April 1 indicated a need for approximately 195 physicians at that time. The total included 40 each in neuropsychiatry, general medicine and general surgery, 15 orthopedists, 35 in tuberculosis-general medicine, 5 X-ray, 15 physical medicine, and 5 cardiologists.

An additional 24 doctors were needed at that time for rating boards. It is anticipated that these positions will be particularly attractive to older men who are interested in work with regular hours or in part-time service.

Applications for medical positions with the Veterans Administration or requests for more detailed information should be sent to the Director of Medical Services, Veterans Administration, Richmond Branch No. 4, Richmond 20, Va.

Dr. Thomas E. Painter,

Recently discharged from the armed forces with the rank of Lieutenant Colonel, is now associated with the Westbrook Sanatorium, Richmond. Before entering the Service he was located at Radford.

Dr. Southward Receives VA Appointment.

Dr. Wilbur R. Southward, Richmond, has been appointed as assistant director of medical services of the Richmond branch office of the Veterans Administration. In this position, he will assist in supervising medical services at their hospitals, homes and offices throughout Virginia, North Carolina, Maryland, West Virginia, and the District of Columbia.

Dr. Barnes Woodhall, associate professor of neurosurgery at Duke University School of Medicine, has been named consultant in neurosurgery for the Richmond branch area.

Virginia Cancer Foundation.

At the meeting held in Richmond on April 22nd, Dr. William T. Sanger, Medical College of Virginia, was elected President to succeed Dr. I. A. Bigger. Dr. Julian L. Rawls, Norfolk, was named one of the vice-presidents, and Dr. George Cooper, Jr., University, re-elected director. Drs. Guy Horsley, Richmond, Joseph Houck, Lynchburg, and Alfred Jones, Roanoke, were among those elected as new directors; and Drs. George Z. Williams, Richmond, Dr. Cooper, Dr. Harvey E. Jordan, University, and L. C. Downing, Roanoke, were re-elected.

Dr. Paul E. Brady,

Class of December 1943, Medical College of Virginia, later serving at the College hospitals, has located in Columbus, Ohio, where he is assisting Dr. George Peters in general practice and surgery.

The American Congress of Physical Medicine

Will hold its annual scientific and clinical session September 4, 5, 6 and 7, inclusive, at the Hotel Pennsylvania in New York. Scientific and clinical sessions will be given each day. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions,

A NEW CEREAL FOR

Infants and Children WITH PAPAYA FRUIT

DRIED FRESH TO PRESERVE NATURAL ENZYMES AND PECTINS

THE LATEST ADDITION to the famous S. M. A. Infant Foods —CEROL . . . something new in infant feeding—FLAVORED . . . with mellow papaya fruit—FORTIFIED . . . with vitamins and minerals — READY TO SERVE . . . a nutritious, precooked, multigrain cereal—Supplied in 8 oz. packages.

Wyeth

REG. U. S. PAT. OFF.

S. M. A. DIVISION • WYETH INCORPORATED • PHILADELPHIA 3 • PA.

XUM

the annual instruction courses will be held September 4, 5, and 6. These will be open to physicians and to therapists registered with the American Registry of Physical Therapy Technicians.

For information concerning the convention and the instruction course, address the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

The American College of Radiology

Announces that its annual meeting will be in San Francisco on June the 29th, the Saturday before opening of the A. M. A. meeting. College headquarters will be the Palace Hotel, and it is suggested that all its members and fellows make reservations there. Dr. M. Laurence Montgomery, 200 Civic Auditorium, San Francisco 2, California, is chairman of the local hotel committee. A special train for the College will be operated from Chicago to San Francisco, leaving Chicago on June the 25th.

The American Radium Society will also meet at this hotel on June 30th and July 1st.

The International College of Surgeons, United States Chapter,

Will hold its Eleventh Annual Assembly and Convocation in Detroit, October 21-22-23, 1946. Surgical clinics in Detroit hospitals will feature the first morning of the Assembly. Thereafter all meetings, the Convocation, and the Exhibition will be in the Masonic Temple, a splendid building affording every convenience. The Detroit Statler and the Book-Cadillac will be hotel headquarters.

Dr. Herbert Acuff of Knoxville, Tenn., is president; Dr. Custis Lee Hall of Washington, D. C., president-elect; and Dr. Louis J. Gariepy of Detroit, Mich., executive secretary. Copy of program and detailed information may be obtained by writing Dr. Gariepy at 16401 Grand River Avenue, Detroit.

Established Hospital for Lease—

A Sanitorium for nervous, mental, alcoholic and drug cases, doing an excellent business, to a reputable physician or medical group. Dr. E. W. Stokes, 923 Cherokee Road, Louisville 4, Ky. (*Adv.*)

Wanted—

Technician for private practice and internal medicine in Newport News, Va. Address "XYZ", care this Journal, 1200 East Clay Street, Richmond 19. (*Adv.*)

For Sale—

Westinghouse shockproof 30 m.a. X-ray machine in good condition. Suitable for both radiographic and fluoroscopic work. Bargain for quick sale. Address "X-Ray", care this Journal, 1200 East Clay Street, Richmond 19. (*Adv.*)

Obituaries

Dr. John Shelton Horsley,

A former president of the Medical Society of Virginia and internationally known surgeon, died at his home in Richmond on April the 7th, at the age of seventy-five. A native of Nelson County, he studied medicine at the University of Virginia, from which he graduated in 1892, and took postgraduate work in New York. After a short time in Virginia, he went to El Paso, Texas, but in a few years returned to Virginia and had since made his home in Richmond. He served as professor of the principles of surgery at the Medical College of Virginia from his return until 1912. He established St. Elizabeth's Hospital that year and continued as surgeon-in-charge to the time of his death. He had done much research work in cancer and was a member of the National Advisory Cancer Foundation and a past president of the Virginia Cancer Foundation. He was an author of note and was the recipient of many honors in recognition of his work as a surgeon, including the presidency of numerous local and national organizations. To encourage research, he established a memorial to his father through a prize of approximately $1,000 to be awarded every two years by a committee in the Department of Medicine at the University of Virginia for an outstanding thesis on research in a problem of general surgery. He was intensely interested also in the Virginia Academy of Science and a former president. Indeed, one wonders how he was able to accomplish so much in his little more than "three score years and ten".

Dr. Horsley is survived by his wife and six chil-

XUM

VALENTINE'S

As a supplement to Intramuscular Liver Therapy in the treatment of Pernicious Anemia Liquid Extract of Liver U. S. P. Valentine has proven helpful in many cases.

This is a crude liver extract retaining the Cohn-Minot and Whipple fractions as well as 5 milligrams of riboflavin per fluid ounce.

VALENTINE CO., INC.
RICHMOND 9, VIRGINIA

For the
Discriminating
Eye Physician

Depend on the Services of a Guild Optician

in
Lynchburg, Virginia

A. G. JEFFERSON

Ground Floor **Allied Arts Bldg.**

Exclusively Optical

Complete
Printing and Binding Service

Commercial, Book and Job Work, Catalogues—Publications
Advertising Literature, Booklets—Broadsides
Office and Factory Forms
Loose-Leaf and Manifold Forms—Ledger Leaves and Loose-Leaf Binders
Paper Ruling
Complete Binding Equipment

Complete Service Under One Roof

Acquaint us with your requirements. We serve you efficiently and economically.

Dial 3-0356

WILLIAMS PRINTING CO.

11-13-15 North Fourteenth Street **RICHMOND, VIRGINIA**

In writing advertisers, please mention VIRGINIA MEDICAL MONTHLY

dren, one of them being Dr. Guy W. Horsley, of this city.

Dr. Maryus Curtis Oldham,

Prominent physician of Lancaster, died February 27th of a heart attack, while on the way to a hospital. He was sixty-five years of age and a graduate of the former University College of Medicine, Richmond, in 1903. Dr. Oldham had practiced in Lancaster County since his graduation and had taken an active part in professional and civic activities. He was for a number of years secretary of the Lancaster County Board of Health, County Coroner, and jail physician. He was a Mason and a past president of the Northern Neck Medical Association. Dr. Oldham had been a member of the Medical Society of Virginia since 1904. His wife and an adopted daughter survive him.

Dr. Moses Peter Rucker,

Well-known physician of Bedford, died of pneumonia on April 4th. He was sixty-nine years of age and graduated from the University of Maryland School of Medicine in 1904. Dr. Rucker had been practicing in Bedford since his graduation. He was a past president of the Bedford County Medical Society, a surgeon for the Norfolk and Western Railroad, and a Mason. He had been a member of the Medical Society of Virginia for thirty-one years. His wife and a daughter survive. A brother is Dr. J. A. Rucker, also of Bedford.

Dr. Richard Henry Cobb,

Prominent physician of Franklin, died in January after an illness of many months. He was eighty-two years of age and graduated from the University of Tennessee School of Medicine in 1883 at the age of nineteen. Dr. Cobb had practiced in Franklin since his graduation and internship and was considered "a part of Franklin" as he had "witnessed its growth from a small village to its present size and many of the people of this town and community were brought into this world by his professional care and skill." He was a member of the Franklin School Board for twenty-three years and a former member of the Town Council. Dr. Cobb was one of the oldest members of the Medical Society of Virginia, having been a member for sixty-two years. Four daughters survive him.

Dr. Nathan W. Stallard,

Prominent Scott County physician, died December 18, at the age of 82, death being due to heart disease. He graduated in medicine from the College of Physicians and Surgeons of Baltimore in 1885, and spent his whole professional life in his native county. He was a former president of the Scott County Medical Society, secretary of the County Board of Health, postmaster, and a member of the town council. He was also a member of the Scott County Draft Board during World War I.

Dr. Thomas Morton Raines,

Wakefield, died April 4th, at the age of seventy-three. He was a graduate of the Medical College of Virginia in 1907 and began the practice of medicine in Wakefield in 1908. Dr. Raines was formerly a member of the Medical Society of Virginia. His wife and two children survive him.

Resolutions on Dr. Gochnauer.

At the regular meeting of the Medical Society of Northern Virginia on April the 9th, the following resolutions were read on the death of Dr. Frederick Gochnauer, which occurred October 9, 1945:

WHEREAS Almighty God has seen fit to call our friend and co-worker, Dr. Frederick Gochnauer, to rest from his labors on earth,

And, WHEREAS, we, the members of the Northern Virginia Medical Society, are deeply grieved by his passing; we will miss his genial smile, wise counsel and deep understanding.

THEREFORE BE IT RESOLVED that we extend to his family our deepest sympathy in their sorrow;

BE IT FURTHER RESOLVED that a copy of these resolutions be sent to Mrs. Gochnauer and be spread upon the minutes of the Society.

CHARLES O. DEARMONT, *Chairman*
P. W. BOYD
ELLSWORTH JOHNSON

CONTROL...
the Core of Confidence

Your Confidence in Penicillin Schenley
Is Assured by the Vast Program of Control
Maintained at Schenley Laboratories

RIGID CONTROL at *every step* in the production of Penicillin Schenley insures an extremely high standard of purity, potency, and pyrogen-freedom.

This fact...and the *continuing* research procedures which determine production methods at the Schenley Laboratories...are the vital core of the confidence with which you can specify Penicillin Schenley.

PENICILLIN SCHENLEY

SCHENLEY LABORATORIES, INC.

Executive Offices: 350 Fifth Avenue, New York, N. Y.

In writing advertisers, please mention VIRGINIA MEDICAL MONTHLY

XUM

SOBILEATE
Choleretic--Cholagogue
EACH TABLET CONTAINS
BILE SALTS 1 GRAIN
SODIUM OLEATE 4 GRAINS
To Assist in Controlling
CONSTIPATION & INDIGESTION
Caused by
Biliary Stasis & Bile Insufficiency
Supplied in bottles of 100 tablets
THE DOMINION LABORATORIES
RICHMOND 19, VIRGINIA

POST-WAR COLLECTIONS

Our Post-War Plan is a friendly aid to patients in paying past due medical bills as they change from war pay to peace pay. Protect your fees by acting now. Write. Our local auditor will call and tell you all about it.

CRANE DISCOUNT CORPORATION
230 West 41st Street, New York 18, N. Y.

New-Born Polish Babies Show Decrease in Weight.

The low standard of feeding in Poland has resulted in an average decrease of 30 per cent in the weight of newly born babies, according to a dispatch from the UNRRA Health Division representative in Warsaw received at Washington headquarters of the United Nations Relief and Rehabilitation Administration. Added to this is the alarming fact that infant mortality has gone up from 12.4 per cent to 27 per cent and in some places near the German border, to 50 per cent.

The effect of malnutrition added to the conditions of life where whole families are crowded into a single room, often amid ruins, accounts for the rise of tuberculosis among children. In Warsaw the Pirquet test gave positive results in 84 per cent of the children, and 50 per cent of them were active cases.

However, the number of clinics and orphanages in Warsaw has doubled in the last two months, and now there is some hope for such children. In most of the emergency homes for orphans and destitute waifs early last winter the only bedding was straw and there was no milk. Now, with extensive help from UNRRA supplies, children both in the institutions and in schools are given some food, warmth and clothing.

Throughout Poland the Ministry of Health is conducting a drive to lower the infant mortality rate and the percentage of tubercular cases among children. Expectant mothers are being taught how to get the most value from the food available and how to care for themselves. Children are being fed in school and used clothing, delivered by UNRRA, is distributed quickly and efficiently among them.

London Air Raids Did Not Increase Mental Disorders During War.

The devastating air raids over London during the war years did not increase mental disorders, according to the London correspondent of *The Journal of the American Medical Association.*

This conclusion, appearing in the March 30 issue of *The Journal,* was based on reports from 216 clinics dealing with mental patients in England. The correspondent said in part:

"The important conclusion is reached that there are no grounds for supposing that the war has caused an increase in the more serious forms of mental disorder requiring admission to a hospital. This is remarkable in view of the heavy bombing, with considerable loss of life and injuries to persons and destruction of buildings in our cities while the country was passing through the greatest danger to which it ever was exposed.

"The threat remains that the coming years may show an increase in neurotic disorders as a result of the difficulties of adjustment associated with demobilization and the return of prisoners who have endured German barbarities."

Dr. C. P. Blacker, who undertook the survey with the cooperation of the Ministry of Health, believes it possible that latent neurosis "may reveal itself in the civilian population when the stresses of war are relaxed."